

XX	
PT	New peptide derivs. - useful as therapeutic agents, for treating gastro-enterological disorders

XX Disclosure; Page 3; 45pp; English.

PS

XX AAR62050 describes the amino acid sequence of human peptide YY (PYY), which was isolated from the endocrine cells of the human gastrointestinal tract and pancreas. Using the equivalent porcine PYY sequence (AAR62049) as a base the PYY analogues described in CC AAR62051-R62082 were produced. The new peptides were found to have a variety of properties, that made them useful as therapeutic agents in the treatment of gastro-enterological disorders. As part of a therapeutic composition they could be used for decreasing CC excess intestinal water and electrolyte secretion, for regulating CC cell proliferation and augmenting nutrient transport, and for CC regulating lipolysis and blood flow.

XX Sequence 36 AA;

Query Match 100.0%; Score 194; DB 15; Length 36;  
Best Local Similarity 100.0%; Pred. No. 2.7e-20;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPEELNRYASLRHYNLVTRQRY 36  
|||||  
Db 1 YPIKPEAGEDASPEELNRYASLRHYNLVTRQRY 36

RESULT 2

AAR97741

ID AAR97741 standard; peptide; 36 AA.

XX AAR97741;

XX

DT 10-JAN-1997 (first entry)

XX Human peptide YY.

XX

XX Peptide YY; PYY; porcine; human; intestine; endocrine cell; gut motility; gastrointestinal tract; pancreas; inhibitor; intestinal secretion; pig; pancreatic tumour; blood flow; serous cyst adenoma; microcystic tumour; solid-cyst tumour; malignant tumour; therapy.

XX

OS Homo sapiens.

XX

XX WO9614854-A1.

XX

XX 23-MAY-1996.

XX

XX 03-NOV-1995; 95WO-US14303.

XX

XX 14-NOV-1994; 94US-0338395.

XX

XX (REGC ) UNIV CALIFORNIA.

PA Mcfadden DW;

PI

XX WPI; 1996-259558/26.

XX

XX Use of peptide YY and its agonists to treat pancreatic tumours - either in vitro or in vivo to reduce tumour cell proliferation

PT

PS Disclosure; Page 3; 22pp; English.

XX

XX AAR97740 and AAR97741 represent porcine and human peptide YY (PYY) respectively. This sequence is isolated from intestine, and is CC localised in the endocrine cells of the gastrointestinal tract and the CC pancreas. PYY is thought to inhibit gut motility and blood flow, to CC mediate intestinal secretion, and stimulate net absorption. These CC sequences, and agonists against them (see AAR97742-R97744), can be used in the method of the invention. The method of the invention is for CC inhibiting pancreatic tumours by contacting them with an effective amount of one of these sequences. The method is effective in treating both CC benign and malignant pancreatic tumours. The types of benign tumour CC pancreatic tumours that can be treated, include, serous cyst adenomas,

CC microcystic tumours, and solid-cyst tumours. The malignant tumours CC capable of being treated by the method of the invention include, CC carcinomas arising from the ducts, acini, or islets of the pancreas.

XX Sequence 36 AA;

Query Match 100.0%; Score 194; DB 17; Length 36;  
Best Local Similarity 100.0%; Pred. No. 2.7e-20;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPEELNRYASLRHYNLVTRQRY 36  
|||||  
Db 1 YPIKPEAGEDASPEELNRYASLRHYNLVTRQRY 36

RESULT 3

AAW51801

ID AAW51801 standard; peptide; 36 AA.

XX

AC AAW51801;

XX

DT 13-OCT-1998 (first entry)

XX Human peptide YY.

XX

XX peptide YY; cell proliferation; nutrient transport; lipolysis; electrolyte secretion; anti-secretory; intestinal water; antimotility.

KW

OS Homo sapiens.

XX

XX WO9820885-A1.

XX

PD 22-MAY-1998.

XX

XX 13-NOV-1996; 96WO-US18374.

XX

XX 13-NOV-1996; 96WO-US18374.

XX

XX (UYCI-) UNIV CININNATI.

XX Balasubramaniam A;

XX

DR WPI; 1998-322327/28.

XX

XX New analogue(s) of peptide YY - used, e.g. to control cell proliferation, nutrient transport, lipolysis and intestinal water and electrolyte secretion

PT

PS Disclosure; Page 3; 54pp; English.

XX

XX The invention relates to peptide YY analogues which may be used e.g. for decreasing excess intestinal water and electrolyte secretion in mammals, CC to regulate cell proliferation (especially intestinal cell CC proliferation), to increase nutrient transport, to regulate lipolysis CC and to regulate blood flow. The peptides exhibit antisecretory and CC antimotility properties and are especially useful in treatment of CC gastrointestinal disorders associated with excess intestinal electrolyte CC and water secretion as well as decreased absorption. The new peptides CC are truncated versions of peptide YY. They interact solely with peptide CC YY receptors and not with homologous receptors such as NPY Y1 and Y3, CC thus minimising unwanted (ant)agonist side reactions. The present CC sequence represents human peptide YY.

XX Sequence 36 AA;

Query Match 100.0%; Score 194; DB 19; Length 36;  
Best Local Similarity 100.0%; Pred. No. 2.7e-20;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPEELNRYASLRHYNLVTRQRY 36  
|||||  
Db 1 YPIKPEAGEDASPEELNRYASLRHYNLVTRQRY 36

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RESULT 4
AAY43335
ID AAY43335 standard; peptide; 36 AA.
XX
XX AAY43335;
AC
XX
DT 25-JAN-2000 (first entry)
XX
XX Peptide Y.
DE
XX Neuropeptide Y: NPY; agonist; peptide YY; PYY; airway restriction;
KW bronchial disease; asthma; bronchitis; laryngitis; Alzheimer's disease;
KW chronic rhinosinusitis; oedema; inflammation; congestive heart failure;
KW cardiomyopathy; coronary arterial disease; myocardial infarction; AIDS;
KW diminished cardiac vagal activity; hypertension; epilepsy; ischaemia;
KW angina; immune response; antihistamine; therapy.
XX
XX Synthetic.
OS
XX WO9951626-A2.
PN
XX
XX 14-OCT-1999.
PD
XX
XX 26-MAR-1999; 99WO-EP02076.
PF
XX
XX 03-APR-1998; 98US-0054393.
PR
XX (BMRA-) BMRA CORP BV.
PA
XX Mutter M, Lacroix J, Grouzmann E;
PI
XX WPI; 1999-620192/53.
DR
XX
XX New agonists of neuropeptide Y containing linear peptide linked to
PT cyclic template peptide, used e.g. to reduce airway restriction in
PT asthma
XX
XX Disclosure; Page 42; 45pp; English.
PS
XX
XX This sequence represents peptide Y (PPY). The invention relates to
CC neuropeptide Y (NPY) agonists comprising: (i) a template comprising a
CC cyclic peptide (Ia) of 3-10 amino acids (aa) in which at least two
CC residues are joined by a naphthyl ring; and (ii) at least one linear
CC peptide (Ib) of 12-37 aa, bound to (i). The agonists, also NPY itself,
CC the related sequence PYY and PYY agonists, are used to reduce airway
CC restriction in patients with bronchial disease, especially asthma and
CC bronchitis. The agonists may also be used: (i) to treat conditions
CC responsive to NPY or PYY, e.g. laryngitis, chronic rhinosinusitis,
CC oedema, inflammation, anxiety, congestive heart failure, cardiomyopathy,
CC coronary arterial disease, diminished cardiac vagal activity,
CC hypertension, Alzheimer's disease, epilepsy, ischaemia, angina,
CC myocardial infarction, acquired immune deficiency syndrome and diseases
CC characterised by reduced immune responses; and (ii) to increase body
CC weight or as an antihistamine. The template induces folding of (Ib) into
CC a biologically active form. Since (i) contain only the C-terminal region
CC of NPY, they are selective for the Y2 receptor, i.e. they do produce the
CC side effects associated with binding to the Y1 receptor.
XX
XX Sequence 36 AA;
SQ
Query Match 100.0%; Score 194; DB 20; Length 36;
Best Local Similarity 100.0%; Pred. No. 2.7e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
DB 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
RESULT 5
AAB12178
ID AAB12178 standard; peptide; 36 AA.
XX
XX AAB12178;
AC
XX 20-JUN-2001 (first entry)
DT
XX Human peptide YY.
DE
XX
XX Human; neuropeptide Y; luteinizing hormone; reproductive system;
KW NPY; NPY-Y4 receptor; precocious puberty;
KW polycystic ovary syndrome; endometriosis; benign prostatic hyperplasia;
KW delayed puberty; amenorrhea; breast cancer; prostate cancer;
KW peptide YY; PYY.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH Modified-site 36
FT /note= "C-terminal amide"
FT
XX WO200030674-A1.
PN
XX
XX 02-JUN-2000.
PD
XX
XX 26-NOV-1999; 99WO-GB03963.
PF
XX
XX 26-NOV-1998; 98GB-0025969.
PR
XX 13-MAY-1999; 99GB-0011178.
PR
XX (FEER ) FERRING BV.
PA
XX Broqua P, Akinsanya K, Hayward A;
PI
XX WPI; 2000-399931/34.
DR
XX
XX Treating human reproductive disorders such as amenorrhea, delayed
PT puberty, polycystic ovary syndrome and endometriosis, comprises
PT administering a neuropeptide Y-Y4 receptor ligand -
XX
XX Disclosure; Page 2; 17pp; English.
PS
XX
XX Neuropeptide Y (NPY) (AAB12177) has a number of effects on the
CC reproductive system. NPY is one of a family of neuropeptides. Other
CC members of the family include the present sequence, peptide YY (PYY), and
CC pancreatic polypeptide (PP, see AAB12179 and AAB12180). Selective NPY-Y4
CC receptor agonists have been found (see AAB12181 to AAB12183). The NPY-Y4
CC receptor agonists cause an increase in the circulating levels of
CC luteinizing hormone (LH) and hence improve the fertility of animals with
CC compromised reproductive function. The NPY-Y4 agonists may be used to
CC treat human reproductive disorders such as delayed puberty and
CC amenorrhea. In addition, NPY-Y4 antagonists may be used to treat human
CC reproductive disorders such as precocious puberty, endometriosis,
CC polycystic ovary syndrome, benign prostatic hyperplasia and
CC hormone-dependent neoplasias e.g. breast cancer and prostate cancer. The
CC present sequence was used in a sequence homology comparison.
XX
XX Sequence 36 AA;
SQ
Query Match 100.0%; Score 194; DB 21; Length 36;
Best Local Similarity 100.0%; Pred. No. 2.7e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
DB 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
RESULT 6
AAY87961
ID AAY87961 standard; peptide; 36 AA.
XX
XX AAY87961;
AC
XX
XX 18-SEP-2000 (first entry)
DT

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XX DE Human neuropeptide PPV fragment.  
 XX DE  
 XX DE Neuropeptide; human; treatment; reproductive disorder; neuropeptide Y;  
 KW endocrine; gynecological; cytostatic; puberty; endometriosis;  
 KW polycystic ovary syndrome; prostatic hyperplasia; amenorrhea.  
 XX OS  
 XX OS Homo sapiens.  
 XX PN GB2344050-A.  
 XX PD 31-MAY-2000.  
 XX PF 26-NOV-1998; 98GB-0025969.  
 XX PR 26-NOV-1998; 98GB-0025969.  
 XX PA (FERR ) FERRING BV.  
 XX PI Akinsanya K, Hayward A, Broqua P;  
 XX DR WPI; 2000-331548/29.  
 XX CC Compositions containing a neuropeptide Y Y4 receptor ligand selective  
 PT for the hypothalamic-pituitary-gonadal axis, for treatment of  
 PT reproductive disorders e.g. delayed or precocious puberty,  
 PT endometriosis and benign prostatic hyperplasia -  
 XX PS Disclosure; Page 2; 12pp; English.  
 XX CC This invention describes the novel use of a composition containing a  
 CC neuropeptide Y (NPY) Y4 receptor ligand for treatment of human  
 CC reproductive disorders. The products described in the invention have  
 CC endocrine, gynecological and cytostatic activity and can be used for the  
 CC treatment of reduced reproductive function, delayed puberty, supranormal  
 CC function of the reproductive organs, precocious puberty, endometriosis,  
 CC polycystic ovary syndrome, benign prostatic hyperplasia, impaired  
 CC reproductive function or amenorrhea. This sequence represents the human  
 CC PPY neuropeptide which is used in the method of the invention.  
 XX SQ Sequence 36 AA;  
 Query Match 100.0%; Score 194; DB 21; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-20;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36  
 DB 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36  
 RESULT 7  
 AAY87550  
 ID AAY87550 standard; peptide; 36 AA.  
 XX AC AAY87550;  
 XX DT 18-JUL-2000 (first entry)  
 XX DE Human peptide YY (PPY).  
 XX PY; peptide YY; human; electrolyte secretion; fluid secretion;  
 KW nutrient uptake; lipolysis; vasoconstriction; gastrointestinal disorder;  
 KW diarrhoea; Crohn's disease; irritable bowel syndrome; ileostomy;  
 KW cachexia.  
 XX OS Homo sapiens.  
 XX FH Key Location/Qualifiers  
 FT Modified-site 36  
 FT /note="C-terminal amide"  
 XX PN US6046167-A.

XX PD 04-APR-2000.  
 XX PF 25-MAR-1998; 98US-0047986.  
 XX PR 25-MAR-1998; 98US-0047986.  
 XX PA (UYCI-) UNIV CINCINNATI.  
 XX PI Balasubramaniam A;  
 XX DR WPI; 2000-327889/28.  
 XX PT New peptide YY analogs especially useful for treating gastrointestinal  
 PT disorders associated with excess intestinal electrolytes and water  
 PT secretion, and decreased absorption, e.g. infectious and inflammatory  
 PT diarrhea -  
 XX PS Disclosure; Column 2; 18pp; English.  
 XX CC The invention relates to novel peptide YY (PPY) analogues  
 CC (AAY8551-f87564 and AAY87568) that can be used for the treatment of  
 CC gastrointestinal disorders. PPY (AAY87549, AAY87550) is a 36 residue  
 CC peptide amide that is released into the circulation after a meal and  
 CC which is thought to play a role in regulating intestinal secretion and  
 CC absorption. It binds to a receptor on intestinal epithelial cells, and  
 CC inhibits intestinal secretion and gut motility. It is therefore a natural  
 CC inhibitor of diarrhoea. PPY has also been implicated in nutrient uptake,  
 CC cell proliferation, lipolysis and vasoconstriction. The compounds of the  
 CC invention are useful for inhibiting fluid and electrolyte secretion in  
 CC the small intestine; augmenting nutrient transport; increasing cell  
 CC proliferation in the gastrointestinal tract; regulating lipolysis in,  
 CC for example, adipose tissue; and regulating blood flow in mammals. The  
 CC analogues are especially useful in the treatment of gastrointestinal  
 CC disorders associated with excess intestinal electrolytes and water  
 CC secretion, as well as decreased absorption. For example, they are useful  
 CC in treating acute viral or bacterial diarrhoea, diarrhoea due to  
 CC protozoal infections, travellers' diarrhoea; inflammatory diarrhoea  
 CC (e.g., Crohn's disease, irritable bowel syndrome); short bowel syndrome;  
 CC or diarrhoea following ileostomy. The peptides can also be used to treat  
 CC an emergency or life-threatening situation involving a gastrointestinal  
 CC disorder, e.g., after surgery or due to cholera; and to treat intestinal  
 CC dysfunction in patients with AIDS, especially those with cachexia. As  
 CC the PPY analogues are shorter than naturally occurring PPY, synthesis  
 CC and purification of the compounds is easier and less costly. The  
 CC analogues interact specifically with PPY receptors and not with receptors  
 CC for the PPY homologue neuropeptide Y (NPY), thus minimising unwanted  
 CC side reactions. The present sequence represents human PPY.  
 XX SQ Sequence 36 AA;  
 Query Match 100.0%; Score 194; DB 21; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-20;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36  
 DB 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36  
 RESULT 8  
 AAB91223  
 ID AAB91223 standard; Peptide; 36 AA.  
 XX AC AAB91223;  
 XX DT 22-JUN-2001 (first entry)  
 XX DE Peptide YY SEQ ID NO:397.  
 XX KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
 KW blood component; modification; succinimidy; maleimido group; amino;  
 KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

XX OS Homo sapiens.  
 OS Synthetic.  
 XX PN WO200069900-A2.  
 XX PD 23-NOV-2000.  
 XX XX 17-MAY-2000; 2000WO-US13576.  
 XX PF 17-MAY-1999; 99US-0134406.  
 PR 10-SEP-1999; 99US-0153406.  
 PR 15-OCT-1999; 99US-0153783.  
 XX XX (CONJ-) CONJUCHEM INC.  
 XX PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;  
 XX DR WPI; 2001-112059/12.  
 XX PT Modifying and attaching therapeutic peptides to albumin prevents  
 PT peptidase degradation, useful for increasing length of in vivo activity  
 PT -  
 XX PS Disclosure: Page 327-328; 733pp; English.  
 XX CC The present invention describes a modified therapeutic peptide (I)  
 CC comprising a therapeutically active amino acid region (III) and a  
 CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to  
 CC a less therapeutically active amino acid region (IV), which covalently  
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
 CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.  
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
 CC factors and neurotransmitters, to protect them from peptidase activity  
 CC in vivo for the treatment of various disorders. Endogenous therapeutic  
 CC peptides are not suitable as drug candidates as they require frequent  
 CC administration due to rapid degradation by peptidases in the body.  
 CC Modifying and attaching therapeutic peptides to albumin prevents or  
 CC reduces the action of peptidases to increase length of activity (half  
 CC life) and specificity as bonding to large molecules decreases  
 CC intracellular uptake and interference with physiological processes.  
 CC AAB90829 to AAB92441 represent peptides which can be used in the  
 CC exemplification of the present invention.  
 XX SQ Sequence 36 AA;  
 Query Match 100.0%; Score 194; DB 22; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-20;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 36  
 Db 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 36  
 RESULT 9  
 AAU06188  
 ID AAU06188 standard; peptide; 36 AA.  
 XX AC AAU06188;  
 XX DT 04-DEC-2001 (first entry)  
 XX DE Human peptide tyrosine-tyrosine (PY).  
 XX KW Human; brain aluminium concentration; central nervous system;  
 KW CNS; peptide tyrosine-tyrosine receptor; PY receptor; PP receptor;  
 KW pancreatic polypeptide receptor; Alzheimer's disease; nootropic;  
 KW neuro protective.  
 XX OS Homo sapiens.  
 XX PN WO200158409-A2.

XX PD 16-AUG-2001.  
 XX PF 07-FEB-2001; 2001WO-US03952.  
 XX PR 08-FEB-2000; 2000US-0499980.  
 XX PA (UYNC-) UNIV NORTH CAROLINA STATE.  
 XX PI Croom WJ, Berg BM, Taylor IL;  
 XX DR WPI; 2001-550001/61.  
 XX PT Reducing aluminium levels in the central nervous system, for the  
 PT treatment of Alzheimer's disease comprises administration of a peptide  
 PT tyrosine receptor agonist or a pancreatic polypeptide receptor agonist  
 PT -  
 XX PS Disclosure: Page 7; 52pp; English.  
 XX CC The present invention relates to a method of reducing aluminium levels  
 CC in the central nervous system (CNS). The method comprises administration  
 CC of a peptide tyrosine-tyrosine (PY) receptor agonist or a pancreatic  
 CC polypeptide (PP) receptor agonist. The method is useful for the  
 CC treatment of Alzheimer's disease and for reducing aluminium levels in  
 CC the central nervous system, especially the brain, of a subject. The  
 CC treatments are effective and do not impart excessive toxicological  
 CC effects. The present sequence represents human PY.  
 XX SQ Sequence 36 AA;  
 Query Match 100.0%; Score 194; DB 22; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-20;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 36  
 Db 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 36  
 RESULT 10  
 AAU85987  
 ID AAU85987 standard; peptide; 36 AA.  
 XX AC AAU85987;  
 XX DT 21-MAY-2002 (first entry)  
 XX DE Modified human peptide YY.  
 XX KW Increased biological potency; prolonged activity; increased half-life;  
 KW glucose intolerance; insulin resistance; type II diabetes; bone disease;  
 KW cancer; inflammatory disorder; obesity; developmental disorder;  
 KW hyperproliferative skin disease; hormone-dependent disease; homeostasis;  
 KW intestinal disease; interleukin-8 production; smooth muscle contraction;  
 KW feeding; blood pressure; pancreatic secretion; mutant; mutein; human;  
 KW peptide YY.  
 XX OS Homo sapiens.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 FT Modified-site 1 /note= "H-Tyr"  
 FT Modified-site 36 /note= "C-terminal amide"  
 FT WO200210195-A2.  
 XX PN 07-FEB-2002.  
 XX PD 02-AUG-2001; 2001WO-CA01119.  
 XX PF 02-AUG-2001; 2001WO-CA01119.  
 XX XX

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PR 02-AUG-2000; 2000US-222619P.
XX
XX (THER-) THERATECHNOLOGIES INC.
XX
XX Gravel D, Habi A, Abribat T;
XX
XX WPI: 2002-206179/26.
XX
XX Novel modified biological peptide with increased biological potency,
XX prolonged activity, increased half-life, for treating glucose
XX intolerance associated or not with insulin resistance pathologies, type
XX II diabetes
XX
XX Claim 5; Page 62; 77pp; English.
XX
XX The present invention relates to modified biological peptides with
XX increased biological potency, prolonged activity and/or increased
XX half-life. The peptides of the invention are useful in the treatment
XX of glucose intolerance which may be associated with insulin resistance
XX pathologies, and in the treatment of type II diabetes. They are also
XX useful for treating bone diseases, cancer, diseases related to
XX inflammatory responses, obesity, autism, pervasive developmental
XX disorders, hyperproliferative skin diseases, hormone-dependent diseases,
XX They can be used for regulating blood glucose, enhancing mucosal
XX regeneration in patients with intestinal diseases, inhibition of
XX interleukin-8 production, stimulation of acid release, homeostasis,
XX regulation of exocrine and endocrine secretions, smooth muscle
XX contraction, feeding, blood pressure, body temperature and cell growth,
XX regulation of food intake and energy balance, and stimulation of
XX pancreatic secretion or cell growth. AA085971-AA086019 represent the
XX modified biological peptides of the invention.
XX
XX Sequence 36 AA;
XX
XX Query Match 100.0%; Score 194; DB 23; Length 36;
XX Best Local Similarity 100.0%; Pred. No. 2.7e-20;
XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQY 36
XX |||||||||||||||||||||||||||||||||||||||
XX Db 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQY 36
XX
XX RESULT 11
XX AAB08020
XX ID AAB08020 standard; Protein; 97 AA.
XX
XX AC AAB08020;
XX
XX 14-NOV-2000 (first entry)
XX
XX Amino acid sequence of a human peptide YY (PYY).
XX
XX Peptide YY; PYY; pancreatic cell growth; pancreatic tissue degeneration;
XX glucose metabolism; insulin resistance; glucose intolerance;
XX KW glucose non-responsiveness; hyperglycemia; obesity; hyperlipidemia;
XX KW hyperfiltration; type II diabetes mellitus.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT Peptide 1..28
XX FT /note= "signal peptide"
XX FT Protein 29..97
XX FT /note= "mature protein"
XX
XX WO200047219-A2.
XX
XX 17-AUG-2000.
XX
XX PF 10-FEB-2000; 2000WO-US03391.
XX
XX PR 10-FEB-1999; 99US-0119577.
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XX (ONTO-) ONTOGENY INC.
XX
XX Pang K, Lu H;
XX
XX WPI: 2000-565257/52.
XX N-PSDB; AAA59713.
XX
XX Promoting the growth of pancreatic cells and reducing degeneration of
XX pancreatic tissue for treating a disease associated with altered
XX glucose metabolism comprises contacting with a composition including
XX (an agonist of) peptide YY
XX
XX Disclosure; Page 82-83; 83pp; English.
XX
XX The present sequence represents a human peptide YY (PYY). PYY triggers
XX gain of function in glucose non-responsive foetal and adult islets which
XX leads to glucose responsivity. The specification describes a method for
XX promoting the growth of pancreatic cells and reducing degeneration of
XX pancreatic tissue. The method comprises contacting pancreatic cells
XX or tissue with a composition including PYY or an agonist of PYY. The
XX method is used for treating a disease, especially in a human, associated
XX with altered glucose metabolism, especially insulin resistance, glucose
XX intolerance or glucose non-responsiveness, hyperglycemia, obesity,
XX hyperlipidemia, hyperfiltration or type II diabetes mellitus.
XX
XX Sequence 97 AA;
XX
XX Query Match 100.0%; Score 194; DB 21; Length 97;
XX Best Local Similarity 100.0%; Pred. No. 8.9e-20;
XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQY 36
XX |||||||||||||||||||||||||||||||||||||||
XX Db 29 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQY 64
XX
XX RESULT 12
XX AAG75364
XX ID AAG75364 standard; Protein; 176 AA.
XX
XX AC AAG75364;
XX
XX 03-SEP-2001 (first entry)
XX
XX Human colon cancer antigen protein SEQ ID NO:6128.
XX
XX Human; colon cancer; colon cancer antigen; diagnosis; detection;
XX colorectal carcinoma; chromosome 17.
XX
XX OS Homo sapiens.
XX
XX WO200122920-A2.
XX
XX 05-APR-2001.
XX
XX 28-SEP-2000; 2000WO-US26524.
XX
XX 29-SEP-1999; 99US-0157137.
XX 03-NOV-1999; 99US-0163280.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Ruben SM, Barash SC, Birse CE, Rosen CA;
XX
XX WPI: 2001-235357/24.
XX N-PSDB; AAH34769.
XX
XX Nucleic acids encoding 4277 human colon cancer-associated polypeptides,
XX useful for preventing, diagnosing and/or treating colorectal cancers -
XX Claim 11; Page 7579-7580; 9803pp; English.
XX
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AAH32943 to AAH37195 and AAG7788 represent human colon cancer-associated nucleic acid molecules (N) and proteins (P), where the proteins are collectively known as colon cancer antigens. The colon cancer antigens have cytostatic activity and can be used in gene therapy and vaccine production. N and P may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate P expression. For example, N and P may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of P by expressing P. Inactive proteins or to supplement the patients own production of P. Additionally, N may be used to produce the colon cancer-associated Ps, by inserting the nucleic acids into a host cell and culturing the cell to express the proteins. N and P can be used in the prevention, diagnosis and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204 and AAB7789 represent sequences used in the exemplification of the present invention.

N.B. Pages 666 to 682 and page 7053 of the sequence listing were missing at time of publication, meaning no sequences are present for SEQ ID NO:1027 to 1052, 7921 and 7922.

Query Match 100.0%; Score 194; DB 22; Length 176;  
Best Local Similarity 100.0%; Pred. No. 1.8e-19;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYIASLRHYNLVTRQRY 36  
|||||  
Db 53 YPIKPEAPGEDASPEELNRYIASLRHYNLVTRQRY 88  
|||||

## RESULT 13

AAH91109  
ID AAB91109 standard; Peptide; 36 AA.

AC AAB91109;

XX 22-JUN-2001 (first entry)

DE Parathyroid hormone (PTH) related peptide SEQ ID NO:283.

KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
KW blood component; modification; succinimidyl; maleimido group; amino;  
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

XX Homo sapiens.

OS Synthetic.

PN WO200069900-A2.

XX 23-NOV-2000.

PF 17-MAY-2000; 2000WO-US13576.

XX 17-MAY-1999; 99US-0134406.

PR 10-SEP-1999; 99US-0153406.

PR 15-OCT-1999; 99US-0159783.

XX (CONJ-) CONJUCHEM INC.

XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;

XX WPI; 2001-112059/12.

XX Modifying and attaching therapeutic peptides to albumin prevents  
PT peptidase degradation, useful for increasing length of in vivo activity

PS Disclosure; Page 285; 733pp; English.

XX The present invention describes a modified therapeutic peptide (I)

CC comprising a therapeutically active amino acid region (III) and a  
CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to

CC a less therapeutically active amino acid region (IV), which covalently  
CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.  
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
CC factors and neurotransmitters, to protect them from peptidase activity  
CC in vivo for the treatment of various disorders. Endogenous therapeutic  
CC peptides are not suitable as drug candidates as they require frequent  
CC administration due to rapid degradation by peptidases in the body.  
CC Modifying and attaching therapeutic peptides to albumin prevents or  
CC reduces the action of peptidases to increase length of activity (half  
CC life) and specificity as bonding to large molecules decreases  
CC intracellular uptake and interference with physiological processes.  
CC AAB90829 to AAB92441 represent peptides which can be used in the  
CC exemplification of the present invention.

XX Sequence 36 AA;

Query Match 96.9%; Score 188; DB 22; Length 36;

Best Local Similarity 97.2%; Pred. No. 1.9e-19;

Matches 35; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYIASLRHYNLVTRQRY 36  
|||||

Db 1 YPIKPEAPGEDASPEELNRYIASLRHYNLVTRQRY 36  
|||||

## RESULT 14

AAH91226

ID AAB91226 standard; Peptide; 36 AA.

XX AAB91226;

XX 22-JUN-2001 (first entry)

DE Peptide YY SEQ ID NO:400.

KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
KW blood component; modification; succinimidyl; maleimido group; amino;  
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

XX Homo sapiens.

OS Synthetic.

XX WO200069900-A2.

XX 23-NOV-2000.

PF 17-MAY-2000; 2000WO-US13576.

XX 17-MAY-1999; 99US-0134406.

PR 10-SEP-1999; 99US-0153406.

PR 15-OCT-1999; 99US-0159783.

XX (CONJ-) CONJUCHEM INC.

XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;

XX WPI; 2001-112059/12.

XX Modifying and attaching therapeutic peptides to albumin prevents  
PT peptidase degradation, useful for increasing length of in vivo activity

PS Disclosure; Page 329; 733pp; English.

XX The present invention describes a modified therapeutic peptide (I)  
CC comprising a therapeutically active amino acid region (III) and a  
CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to  
CC a less therapeutically active amino acid region (IV), which covalently  
CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.  
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
CC factors and neurotransmitters, to protect them from peptidase activity





GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: February 27, 2003, 14:35:44 ; Search time:14 Seconds  
(without alignments)  
75.659 Million cell updates/sec

Title: US-09-634-363-2

Perfect score: 194

Sequence: 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_AA:\*

- 1: /cgn2\_6/ptodata/1/1aa/5A\_COMB.pep:\*
- 2: /cgn2\_6/ptodata/1/1aa/5B\_COMB.pep:\*
- 3: /cgn2\_6/ptodata/1/1aa/6A\_COMB.pep:\*
- 4: /cgn2\_6/ptodata/1/1aa/6B\_COMB.pep:\*
- 5: /cgn2\_6/ptodata/1/1aa/PCTUS\_COMB.pep:\*
- 6: /cgn2\_6/ptodata/1/1aa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	194	100.0	36	1 US-08-338-395-2	Sequence 2, Appli
2	194	100.0	36	1 US-08-329-151-2	Sequence 2, Appli
3	194	100.0	36	3 US-09-054-393-2	Sequence 2, Appli
4	194	100.0	36	3 US-09-047-986B-2	Sequence 2, Appli
5	194	100.0	36	4 US-09-229-900-2	Sequence 2, Appli
6	194	100.0	36	5 PCT-US95-14303-2	Sequence 2, Appli
7	184	94.8	36	1 US-07-882-923-3	Sequence 3, Appli
8	184	94.8	36	1 US-08-338-395-1	Sequence 1, Appli
9	184	94.8	36	1 US-08-329-151-1	Sequence 1, Appli
10	184	94.8	36	3 US-09-047-986B-1	Sequence 1, Appli
11	184	94.8	36	4 US-09-181-941-4	Sequence 4, Appli
12	184	94.8	36	5 PCT-US95-14303-1	Sequence 1, Appli
13	175	90.2	36	1 US-08-329-151-9	Sequence 9, Appli
14	162	83.5	36	4 US-09-181-941-1	Sequence 1, Appli
15	158.5	81.7	35	1 US-07-776-272-30	Sequence 30, Appl
16	153	78.9	36	4 US-09-181-941-2	Sequence 2, Appli
17	146	75.3	36	1 US-07-882-923-1	Sequence 1, Appli
18	146	75.3	36	1 US-08-264-030-1	Sequence 1, Appli
19	146	75.3	36	1 US-08-338-395-4	Sequence 4, Appli
20	146	75.3	36	3 US-08-907-403A-2	Sequence 2, Appli
21	146	75.3	36	4 US-09-181-941-5	Sequence 5, Appli
22	146	75.3	36	5 PCT-US95-14303-4	Sequence 4, Appli
23	144	74.2	36	1 US-07-882-923-2	Sequence 2, Appli
24	144	74.2	36	1 US-08-338-395-3	Sequence 3, Appli
25	144	74.2	36	1 US-08-329-151-24	Sequence 24, Appl
26	144	74.2	36	3 US-08-907-403A-1	Sequence 1, Appli
27	144	74.2	36	5 PCT-US95-14303-3	Sequence 3, Appli

28	144	74.2	97	3 US-09-054-393-1	Sequence 1, Appli
29	144	74.2	97	3 US-08-994-946A-6	Sequence 6, Appli
30	144	74.2	97	4 US-09-229-900-1	Sequence 1, Appli
31	144	74.2	97	4 US-09-291-994-6	Sequence 6, Appli
32	141	72.7	36	4 US-09-181-941-3	Sequence 3, Appli
33	129	66.5	24	3 US-09-054-393-7	Sequence 7, Appli
34	129	66.5	24	4 US-09-229-900-7	Sequence 7, Appli
35	127	65.5	32	4 US-09-125-138-10	Sequence 10, Appl
36	115.5	59.5	31	1 US-07-776-272-23	Sequence 23, Appl
37	106	54.6	36	2 US-08-806-203-1	Sequence 1, Appli
38	103	53.1	36	1 US-07-776-272-18	Sequence 18, Appl
39	101	52.1	23	4 US-09-181-941-6	Sequence 6, Appli
40	97	50.0	28	1 US-08-264-030-3	Sequence 3, Appli
41	96	49.5	28	1 US-08-264-030-5	Sequence 5, Appli
42	95	49.0	28	1 US-08-264-030-10	Sequence 10, Appl
43	88	45.4	20	1 US-07-882-923-11	Sequence 11, Appl
44	86.5	44.6	25	1 US-08-264-030-7	Sequence 7, Appli
45	85	43.8	19	1 US-07-882-923-4	Sequence 4, Appli

ALIGNMENTS

RESULT 1  
US-08-338-395-2  
; Sequence 2, Application US/08338395  
; Patent No. 5574010  
; GENERAL INFORMATION:  
; APPLICANT: McFadden, David W  
; TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS WITH  
; TITLE OF INVENTION: PEPTIDE YY AND ANALOGS THEREOF  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: POMS, SMITH, LANDE & ROSE  
; STREET: 2029 Century Park East 38th Floor  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90067  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/338,395  
; FILING DATE:  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Oldenkamp, David J  
; REGISTRATION NUMBER: 29421  
; REFERENCE/DOCKET NUMBER: 107012  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 310-788-5046  
; TELEFAX: 310-277-1297  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; TYPE: amino acid  
; LENGTH: 36 amino acids  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; ORIGINAL SOURCE:  
; ORGANISM: HUMAN PEPTIDE YY  
US-08-338-395-2

Query Match 100.0%; Score 194; DB 1; Length 36;  
Best Local Similarity 100.0%; Pred. No. 8.7e-22;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36  
DB 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

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RESULT 2
US-08-329-151-2
; Sequence 2, Application US/08329151
; Patent No. 5604203
; GENERAL INFORMATION:
; APPLICANT: Balasubramaniam, A.
; TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USES
; TITLE OF INVENTION: THEREOF
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 MB
; COMPUTER: IBM PS/2 Model 502 or 55sx
; OPERATING SYSTEM: MS-DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/329,151
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/038,534
; FILING DATE: 3/29/93
; APPLICATION NUMBER: 08/109,326
; FILING DATE: 08/19/93
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul T. Clark
; REGISTRATION NUMBER: 30,162
; REFERENCE/DOCKET NUMBER: 00537/105001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36
; TYPE: amino acid
; STRANDEDNESS: N/A
; TOPOLOGY: linear
US-08-329-151-2

Query Match 100.0%; Score 194; DB 1; Length 36;
Best Local Similarity 100.0%; Pred. No. 8.7e-22;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36
Db 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36

RESULT 3
US-09-054-393-2
; Sequence 2, Application US/09054393
; Patent No. 6017879
; GENERAL INFORMATION:
; APPLICANT: Mutter, Manfred
; APPLICANT: Lacroix, Jean S.
; APPLICANT: Grouzmann, Eric
; TITLE OF INVENTION: Template Associated NPY Y2-Receptor
; TITLE OF INVENTION: Agonists
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Vinson & Elkins LLP
; STREET: 1455 Pennsylvania Avenue, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.
```

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; ZIP: 20004-1008
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,393
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sanzo, Michael A.
; REGISTRATION NUMBER: 36,912
; REFERENCE/DOCKET NUMBER: BMR350/48000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)639-6585
; TELEFAX: (202)639-6604
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: not relevant
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-09-054-393-2

Query Match 100.0%; Score 194; DB 3; Length 36;
Best Local Similarity 100.0%; Pred. No. 8.7e-22;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36
Db 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36

RESULT 4
US-09-047-986B-2
; Sequence 2, Application US/09047986B
; Patent No. 6046167
; GENERAL INFORMATION:
; APPLICANT: Balasubramanian, Ambikaipakan
; TITLE OF INVENTION: PEPTIDE YY ANALOGS
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Frost & Jacobs, L.L.P.
; STREET: 2500 PNC Center, 201 East Fifth St.
; CITY: Cincinnati
; STATE: OH
; COUNTRY: USA
; ZIP: 45202-4182
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: Word 97
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/047,986B
; FILING DATE: 25 March 1998
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kristyne A. Bullock
; REGISTRATION NUMBER: 42,371
; REFERENCE/DOCKET NUMBER: 9183030/508
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (513) 651-6731
; TELEFAX: (513) 651-6981
; TELEX: 21-4396 F&J Cin
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-047-986B-2

Query Match      100.0%; Score 194; DB 3; Length 36;
Best Local Similarity 100.0%; Pred. No. 8.7e-22;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36
Db 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

RESULT 5
US-09-229-900-2
; Sequence 2, Application US/09229900
; Patent No. 6288029
; GENERAL INFORMATION:
; APPLICANT: Mutter, Manfred
; APPLICANT: Lacroix, Jean S.
; APPLICANT: Grouzmann, Eric
; TITLE OF INVENTION: Template Associated NPY Y2-Receptor
; TITLE OF INVENTION: Agonists
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Vinson & Elkins LLP
; STREET: 1455 Pennsylvania Avenue, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.
; ZIP: 20004-1008
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/229,900
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sanzo, Michael A.
; REGISTRATION NUMBER: 36,912
; REFERENCE/DOCKET NUMBER: BMR350/48000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)639-6585
; TELEFAX: (202)639-6604
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: not relevant
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-09-229-900-2

Query Match      100.0%; Score 194; DB 4; Length 36;
Best Local Similarity 100.0%; Pred. No. 8.7e-22;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36
Db 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

RESULT 6
PCT-US95-14303-2
; Sequence 2, Application PC/TUS9514303
; GENERAL INFORMATION:
; APPLICANT: McFadden, David W
; TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS
; TITLE OF INVENTION: WITH PEPTIDE YY AND ANALOGS THEREOF
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: POMs, SMITH, LANDE & ROSE
; STREET: 2029 Century Park East 38th Floor
; CITY: Los Angeles
; STATE: CA
; COUNTRY: USA
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/14303
; FILING DATE: 03 November 1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Oldenkamp, David J
; REGISTRATION NUMBER: 29421
; REFERENCE/DOCKET NUMBER: 107012F
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 310-788-5046
; TELEFAX: 310-277-1297
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: HUMAN PEPTIDE YY
PCT-US95-14303-2

Query Match      100.0%; Score 194; DB 5; Length 36;
Best Local Similarity 100.0%; Pred. No. 8.7e-22;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36
Db 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

RESULT 7
US-07-882-923-3
; Sequence 3, Application US/07882923
; Patent No. 5328899
; GENERAL INFORMATION:
; APPLICANT: Boublik, Jaroslav H.
; APPLICANT: Rivier, Jean E.F.
; APPLICANT: Brown, Marvin R.
; APPLICANT: Scott, Neal A.
; TITLE OF INVENTION: NPY PEPTIDE ANALOGS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fitch, Even, Tabin & Flannery
; STREET: 4250 Executive Square, Suite 510
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/882,923
; FILING DATE: 19920512
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/503,198
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CLASSIFICATION: 514  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Oidenkamp, David J  
 REGISTRATION NUMBER: 29421  
 REFERENCE/DOCKET NUMBER: 107012  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 310-788-5046  
 TELEFAX: 310-277-1297  
 INFORMATION FOR SEQ ID NO: 1:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 36 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 ORIGINAL SOURCE:  
 ORGANISM: porcine peptide YY  
 US-08-338-395-1

Query Match 94.8%; Score 184; DB 1; Length 36;  
 Best Local Similarity 94.4%; Pred. No. 2.6e-20;  
 Matches 34; Conservative 1; Mismatches 1; Indels

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; RESULT 10
; US-09-047-986B-1
; Sequence 1, Application US/09047986B
; Patent No. 6046167
; GENERAL INFORMATION:
; APPLICANT: Balasubramanian, Ambikaipakan
; TITLE OF INVENTION: PETIDE YY ANALOGS
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Frost & Jacobs, L.L.P.
; STREET: 2500 PNC Center, 201 East Fifth
; CITY: Cincinnati
;

```

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; STATE: OH
; COUNTRY: USA
; ZIP: 45202-4182
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: Word 97
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/047,986B
; FILING DATE: 25 March 1998
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kristyne A. Bullock
; REGISTRATION NUMBER: 42,371
; REFERENCE/DOCKET NUMBER: 9183030/508
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (513) 651-6731
; TELEFAX: (513) 651-6981
; TELEX: 21-4396 F&J Cin
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-047-986B-1

Query Match 94.8%; Score 184; DB 3; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.6e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36
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DB 1 YPAKPEAPGEDASPEELSRYYASLRHLYNLVTRQRY 36

RESULT 11
US-09-181-941-4
; Sequence 4, Application US/09181941
; Patent No. 6440690
; GENERAL INFORMATION:
; APPLICANT: Mor, Amram
; Vouldoukis, Ioannis
; Nicolas, Pierre
; TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
; OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESS: Pennie & Edmonds LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2811
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/181,941
; FILING DATE: 28-Oct-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/574,701
; FILING DATE: 19-DEC-1995
; APPLICATION NUMBER: FR 95 07831
; FILING DATE: 29-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 3909-0021-999
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; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-493-4935
; TELEFAX: 650-493-5556
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. 6440690e
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-181-941-4

Query Match 94.8%; Score 184; DB 4; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.6e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36
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RESULT 12
PCT-US95-14303-1
; Sequence 1, Application PC/TUS9514303
; GENERAL INFORMATION:
; APPLICANT: McFadden, David W
; TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS
; WITH PEPTIDE YY AND ANALOGS THEREOF
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: POMS, SMITH, LANDE & ROSE
; STREET: 2029 Century Park East 38th Floor
; CITY: Los Angeles
; STATE: CA
; COUNTRY: USA
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/14303
; FILING DATE: 03 November 1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Oldenkamp, David J
; REGISTRATION NUMBER: 29421
; REFERENCE/DOCKET NUMBER: 107012F
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 310-788-5046
; TELEFAX: 310-277-1297
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: porcine peptide YY
; PCT-US95-14303-1

Query Match 94.8%; Score 184; DB 5; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.6e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHLYNLVTRQRY 36
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1  RESULT 14
2  US-09-181-941-1
3  ; Sequence 1, Application US/09181941
4  ; Patent No. 6440690
5  ; GENERAL INFORMATION:
6  ; APPLICANT: Mor, Amram
7  ; Vouldoukis, Ioannis
8  ; Nicolas, Pierre
9  ; TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
10 ; OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
11 ;
12 ; NUMBER OF SEQUENCES: 16
13 ; CORRESPONDENCE ADDRESS:
14 ; ADDRESSEE: Pennile & Edmonds LLP

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; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2811
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/181,941
; FILING DATE: 28-Oct-1998
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/574,701
; FILING DATE: 19-DEC-1995
; APPLICATION NUMBER: FR 95 07831
; FILING DATE: 29-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 3909-0021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-493-4935
; TELEFAX: 650-493-5556
;
; TELEFAX: 66141 PENNIE
;
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
; MOLECULE TYPE: No. 6440690e
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
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; US-09-181-941-1
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; Query Match 83.5%; Score 162; DB 4; Length 36;
; Best Local Similarity 77.8%; Pred. No. 4.3e-17;
; Matches 28; Conservative 5; Mismatches 3; Indels
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; QY 1 YPIKPEAGDASPEELNRYIASLRHLYNLVTRQY 36
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; Db 1 YPPKSPGDASPEEMNKYLTALRHVNLVTRQY 36
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; RESULT 15
; US-07-776-272-30
; Sequence 30, Application US/07776272
; Patent No. 5612454
; GENERAL INFORMATION:
; APPLICANT: Kaminuma, Toshihiko
; APPLICANT: Iida, Toshi
; APPLICANT: Tajima, Masahiro
; TITLE OF INVENTION: Process for Purification of Polypeptide
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Wegner, Cantor, Mueller & Player
; STREET: 1233 20th St. N.W. P.O. Box 18218
; CITY: Washington
; STATE: District of Columbia
; COUNTRY: United States of America
; ZIP: 20036-8218
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/776,272
; FILING DATE: 19911129
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:

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; NAME: Player, William E
; REGISTRATION NUMBER: 31,409
; REFERENCE/DOCKET NUMBER: P-450-23167
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-887-0400
; TELEFAX: 202-887-0605
; TELEX: 440706
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 35 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: YES
; US-07-776-272-30

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Query Match      81.7%; Score 158.5; DB 1; Length 35;
Best Local Similarity 88.9%; Pred. No. 1.4e-16;
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Db 1 YPAKPEAGEDASPEELSR-XASLRHYNLVTQRQY 35

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Job time : 15 secs

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GenCore version 5.1.3  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: February 27, 2003, 14:36:19 ; Search time 12 Seconds  
(without alignments)  
113.165 Million cell updates/sec

Title: us-09-634-363-2

Perfect score: 194

Sequence: 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

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Searched: 174566 seqs, 37721826 residues

Total number of hits satisfying chosen parameters: 174566

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published\_Applications\_AA:\*

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- 2: /cgn2\_6/ptodata/1/pubpaa/ECT\_NEW\_PUB.pep.\*
- 3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep.\*
- 4: /cgn2\_6/ptodata/1/pubpaa/US06\_PUBCOMB.pep.\*
- 5: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep.\*
- 6: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep.\*
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- 12: /cgn2\_6/ptodata/1/pubpaa/US10\_PUBCOMB.pep.\*
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- 14: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	184	94.8	36	12	US-10-038-045-4
3	180	92.8	34	12	US-10-016-969-3
4	162	83.5	36	12	US-10-038-045-1
5	153	78.9	36	12	US-10-038-045-2
6	146	75.3	36	12	US-10-038-045-5
7	144	74.2	36	12	US-10-016-969-4
8	144	74.2	97	9	US-10-002-048A-2
9	141	72.7	36	12	US-10-038-045-3
10	132	68.0	34	12	US-10-016-969-5
11	106	54.6	36	12	US-10-016-969-1
12	102	52.6	95	10	US-09-757-712-2
13	101	52.1	23	12	US-10-038-045-6
14	99	51.0	178	9	US-09-965-528-16
15	89	45.9	85	10	US-09-925-300-1040
16	77	39.7	15	12	US-10-016-969-6
17	67	34.5	33	10	US-09-939-825-27
18	55	28.4	1374	9	US-09-900-425A-2
19	54	27.8	446	10	US-09-925-301-1199

20	53	27.3	98	10	US-09-205-658-58	Sequence 58, Appl
21	53	27.3	98	10	US-09-844-353A-58	Sequence 58, Appl
22	53	27.3	492	10	US-09-764-898-206	Sequence 206, Appl
23	53	27.3	509	10	US-09-205-658-46	Sequence 46, Appl
24	53	27.3	509	10	US-09-844-353A-46	Sequence 46, Appl
25	53	27.3	635	10	US-09-844-353A-101	Sequence 101, Appl
26	52.5	27.1	358	10	US-09-864-761-48087	Sequence 48087, A
27	52	26.8	260	9	US-09-840-243B-11	Sequence 11, Appl
28	52	26.8	260	9	US-09-840-243B-12	Sequence 12, Appl
29	50.5	26.0	269	9	US-09-832-129-65	Sequence 65, Appl
30	50.5	26.0	300	9	US-09-832-129-66	Sequence 66, Appl
31	50.5	26.0	365	9	US-09-832-129-67	Sequence 67, Appl
32	50.5	26.0	742	9	US-10-077-111-11	Sequence 11, Appl
33	50	25.8	84	10	US-09-867-550-1630	Sequence 1630, Ap
34	50	25.8	551	9	US-09-870-759-57	Sequence 57, Appl
35	50	25.8	1203	10	US-09-799-875-5	Sequence 5, Appli
36	50	25.8	2923	10	US-09-788-711A-4	Sequence 4, Appli
37	50	25.8	2956	10	US-09-788-711A-2	Sequence 2, Appli
38	49.5	25.5	187	10	US-09-976-451-7	Sequence 7, Appli
39	49	25.3	269	9	US-09-840-243B-13	Sequence 13, Appl
40	49	25.3	315	9	US-09-808-602-65	Sequence 65, Appl
41	49	25.3	844	10	US-09-813-148-4	Sequence 4, Appli
42	49	25.3	844	10	US-09-810-796-14	Sequence 14, Appl
43	49	25.3	871	9	US-10-128-870-20	Sequence 20, Appl
44	48.5	25.0	489	9	US-10-108-605-39	Sequence 39, Appl
45	48	24.7	963	10	US-09-801-368-74	Sequence 74, Appl

ALIGNMENTS

RESULT 1  
US-10-016-969-2  
; Sequence 2, Application US/10016969  
; Patent No. US20020141985A1

; GENERAL INFORMATION:  
; APPLICANT: Anylin Pharmaceuticals, Inc.  
; APPLICANT: Pittner, Richard

; APPLICANT: Young, Andrew

; APPLICANT: Paterniti, James

; TITLE OF INVENTION: Peptide YY and Peptide YY Agonists for the Treatment of Metabo

; TITLE OF INVENTION: Disorders

; FILE REFERENCE: 24001-010

; CURRENT APPLICATION NUMBER: US/10/016,969

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: US 60/256,216

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 2

; LENGTH: 36

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-016-969-2

Query Match 100.0%; Score 194; DB 12; Length 36;

Best Local Similarity 100.0%; Pred. No. 2.4e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

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Db 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36

RESULT 2

US-10-038-045-4

; Sequence 4, Application US/10038045

; Patent No. US20020150964A1

; GENERAL INFORMATION:

; APPLICANT: Mor, Anram

; Vouldoukis, Ioannis

; Nicolas, Pierre

; TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION

; OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
;
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2811
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/038,045
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/181,941
; FILING DATE: 28-Oct-1998
; APPLICATION NUMBER: US 08/574,701
; FILING DATE: 19-DEC-1995
; APPLICATION NUMBER: FR 95 07831
; FILING DATE: 29-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 3909-0021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-493-4935
; TELEFAX: 650-493-5556
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 4:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. US20020150964A1e
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-038-045-4
Query Match 94.8%; Score 184; DB 12; Length 36;
Best Local Similarity 94.4%; Pred. No. 5.1e-18;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 YPIKPEAGEDASPEELNRYASLRHYLNLVTQRY 36
|| |||||
DB 1 YPAKPEAGEDASPEELSRYSRHYLNLVTQRY 36
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RESULT 3
US-10-016-969-3
; Sequence 3, Application US/10016969
; Patent No. US20020141985A1
; GENERAL INFORMATION:
; APPLICANT: Amylin Pharmaceuticals, Inc.
; APPLICANT: Pittner, Richard
; APPLICANT: Young, Andrew
; APPLICANT: Paterniti, James
; TITLE OF INVENTION: Peptide YY and Peptide YY Agonists for the Treatment of Metabolic
; FILE REFERENCE: 24001-010
; CURRENT APPLICATION NUMBER: US/10/016,969
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: US 60/256,216
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 34
; TYPE: PRT

; ORGANISM: Homo sapiens
US-10-016-969-3
Query Match 92.8%; Score 180; DB 12; Length 34;
Best Local Similarity 100.0%; Pred. No. 1.6e-17;
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3 IKPEAGEDASPEELNRYASLRHYLNLVTQRY 36
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DB 1 IKPEAGEDASPEELNRYASLRHYLNLVTQRY 34
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RESULT 4
US-10-038-045-1
; Sequence 1, Application US/10038045
; Patent No. US20020150964A1
; GENERAL INFORMATION:
; APPLICANT: Mot, Amram
; Vouldoukis, Ioannis
; Nicolas, Pierre
; TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
; OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2811
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/038,045
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/181,941
; FILING DATE: 28-Oct-1998
; APPLICATION NUMBER: US 08/574,701
; FILING DATE: 19-DEC-1995
; APPLICATION NUMBER: FR 95 07831
; FILING DATE: 29-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 3909-0021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-493-4935
; TELEFAX: 650-493-5556
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. US20020150964A1e
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-038-045-1
Query Match 83.5%; Score 162; DB 12; Length 36;
Best Local Similarity 77.8%; Pred. No. 4.2e-15;
Matches 28; Conservative 5; Mismatches 3; Indels 0; Gaps 0;
QY 1 YPIKPEAGEDASPEELNRYASLRHYLNLVTQRY 36
|| |||||
DB 1 YPPKPEAGEDASPEEMNKYLALRHYLNLVTQRY 36
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RESULT 5
US-10-038-045-2
; Sequence 2, Application US/10038045
; Patent No. US20020150964A1
; GENERAL INFORMATION:
; APPLICANT: Mor, Anram
; Vouldoukis, Ioannis
; Nicolas, Pierre
; TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
; OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2811
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA: US/10/038,045
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/181,941
; FILING DATE: 28-Oct-1998
; APPLICATION NUMBER: US 08/574,701
; FILING DATE: 19-DEC-1995
; APPLICATION NUMBER: FR 95 07831
; FILING DATE: 29-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 3909-0021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-493-4935
; TELEFAX: 650-493-5556
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: NO. US20020150964A1e
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
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Best Local Similarity 75.0%; Pred. No. 6.5e-14;
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; Patent No. US20020150964A1
; GENERAL INFORMATION:
; APPLICANT: Mor, Anram
; Vouldoukis, Ioannis
; Nicolas, Pierre
; TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
; OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
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; ADDRESSEE: Pennie & Edmonds LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2811
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA: US/10/038,045
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
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; APPLICATION NUMBER: US/09/181,941
; FILING DATE: 28-Oct-1998
; APPLICATION NUMBER: US 08/574,701
; FILING DATE: 19-DEC-1995
; APPLICATION NUMBER: FR 95 07831
; FILING DATE: 29-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 3909-0021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-493-4935
; TELEFAX: 650-493-5556
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: NO. US20020150964A1e
; SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-10-038-045-5
Query Match 75.3%; Score 146; DB 12; Length 36;
Best Local Similarity 69.4%; Pred. No. 5.5e-13;
Matches 25; Conservative 6; Mismatches 5; Indels 0; Gaps 0;
QY 1 YPKPEAPGEDASPEELNRYASLRHLYNLVTQRY 36
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Db 1 YPSKPDNPGEDAPAEPLARYSALRYHLYNLVTQRY 36
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RESULT 7
US-10-016-969-4
; Sequence 4, Application US/10016969
; Patent No. US20020141985A1
; GENERAL INFORMATION:
; APPLICANT: Anylin Pharmaceuticals, Inc.
; APPLICANT: Pittner, Richard
; APPLICANT: Young, Andrew
; APPLICANT: Paterniti, James
; TITLE OF INVENTION: Peptide YY and Peptide YY Agonists for the Treatment of Metabo
; TITLE OF INVENTION: Disorders
; FILE REFERENCE: 24001-010
; CURRENT APPLICATION NUMBER: US/10/016,969
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: US 60/256,216
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4
; LENGTH: 36
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-016-969-4
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APPLICANT: PATEMILL, James

TITLE OF INVENTION: Peptide YY and Peptide YY Agonists for the Treatment of Metabo

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; SOFTWARE: FastSeq for Windows Version 2.0.0
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; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: US 60/256,216
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 1
; LENGTH: 36
; TYPE: PRT
; ORGANISM: Homo sapiens
;
US-10-016-969-1
;
Query Match 54.6%; Score 106; DB 12; Length 36;
Best Local Similarity 48.6%; Pred. No. 1.1e-07;
Matches 17; Conservative 11; Mismatches 7; Indels 0; Gaps 0;
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QY 2 PIRPEAPGEDASPEELNRYASLRHYNLVTRQRY 36
|:| |::|::|::|:| | | | | | | | | |
Db 2 PLEPVPGDNTPEQMAQYAADLRYYINMLTRPY 36
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RESULT 12
US-09-757-712-2
; Sequence 2, Application US/09757712
; Patent No. US20010016339A1
; GENERAL INFORMATION:
; APPLICANT: SOUTHAN, CHRISTOPHER
; TITLE OF INVENTION: NOVEL COMPOUNDS
; FILE REFERENCE: GP-30015-C1
; CURRENT APPLICATION NUMBER: US/09/757,712
; CURRENT FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: EP 97307187.1
; PRIOR FILING DATE: 1997-09-16
; PRIOR APPLICATION NUMBER: 09/110,715
; PRIOR FILING DATE: 1998-07-07
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 95
; TYPE: PRT
; ORGANISM: HOMO SAPIENS
;
US-09-757-712-2
;
Query Match 52.6%; Score 102; DB 10; Length 95;
Best Local Similarity 45.7%; Pred. No. 1.1e-06;
Matches 16; Conservative 11; Mismatches 8; Indels 0; Gaps 0;
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QY 2 PIKPEAPGEDASPEELNRYASLRHYNLVTRQRY 36
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Db 31 PLEPLYPGDTTPEQMAQYTAELRRYYINMLTRHY 65
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;
RESULT 13
US-10-038-045-6
; Sequence 6, Application US/10038045
; Patent No. US20020150964A1
; GENERAL INFORMATION:
; APPLICANT: Mot, Amram
; Vouldoukis, Ioannis
; Nicolas, Pierre
;
TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
;
NUMBER OF SEQUENCES: 16
;
CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2811
;
COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
;
;
; SOFTWARE: FastSeq for Windows Version 2.0.0
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/038,045
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
;
PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/181,941
; FILING DATE: 28-Oct-1998
; APPLICATION NUMBER: US 08/574,701
; FILING DATE: 19-DEC-1995
; APPLICATION NUMBER: FR 95 07831
; FILING DATE: 29-JUN-1995
;
ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 3909-0021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-493-4935
; TELEFAX: 650-493-5556
; TELEX: 66141 PENNIE
;
INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 23 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. US20020150964A1e
; SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-10-038-045-6
;
Query Match 52.1%; Score 101; DB 12; Le
Best Local Similarity 73.9%; Pred. No. 2.9e-07;
Matches 17; Conservative 4; Mismatches 2; I
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QY 14 PEELNRYASLRHYNLVTRQRY 36
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Db 1 PEEMKNYLTALRHYINLVTRQRY 23
;
;
RESULT 14
US-09-965-528-16
; Sequence 16, Application US/09965528
; Publication No. US20020187523A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: BURFORD, Neil
; APPLICANT: BANDMAN, Olga
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: AZIMZAI, Yalda
; APPLICANT: LU, Dyung Alina M.
; APPLICANT: PATTERSON, Chandra
; TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
; FILE REFERENCE: PF-0701 USA
; CURRENT APPLICATION NUMBER: US/09/965,528
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/134,949
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/144,270
; PRIOR FILING DATE: 1999-07-15
; PRIOR APPLICATION NUMBER: 60/146,700
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 60/157,508
; PRIOR FILING DATE: 1999-10-04
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PERL Program
; SEQ ID NO 16
; LENGTH: 178
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:

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; NAME/KEY: misc.feature  
; OTHER INFORMATION: Incyte ID No. US20020187523A1 5037143CD1  
US-09-965-528-16

Query Match 51.0%; Score 99; DB 9; Length 178;  
Best Local Similarity 47.1%; Pred. No. 5.8e-06;  
Matches 16; Conservative 11; Mismatches 7; Indels 0; Gaps 0;

QY 2 PIKPEAPGEDASPEELNRYRYASLRHYLNLTQR 35  
Db 31 PLEPVYGDNATPEQMAQYAADLRRYINMLTRPR 64

RESULT 15

US-09-925-300-1040  
; Sequence 1040, Application US/09925300  
; Patent No. US20020151681A1  
; GENERAL INFORMATION:  
; APPLICANT: Craig Rosen,  
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies  
; FILE REFERENCE: PA101  
; CURRENT APPLICATION NUMBER: US/09/925,300  
; PRIOR FILING DATE: 2001-08-10  
; PRIOR APPLICATION NUMBER: PCT/US00/05988  
; PRIOR FILING DATE: 2000-03-08  
; PRIOR APPLICATION NUMBER: 60/124,270  
; PRIOR FILING DATE: 1999-03-12  
; NUMBER OF SEQ ID NOS: 1890  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 1040  
; LENGTH: 85  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: SITE  
; LOCATION: (30)  
; OTHER INFORMATION: xaa equals any of the naturally occurring L-amino acids  
US-09-925-300-1040

Query Match 45.9%; Score 89; DB 10; Length 85;  
Best Local Similarity 56.7%; Pred. No. 5.2e-05;  
Matches 14; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 16 ELNRYRYASLRHYLNLTQR 36  
Db 32 DMARYYSALRHYINLTQR 52

Search completed: February 27, 2003, 14:39:00  
Job time : 13 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: February 27, 2003, 14:34:48 ; Search time 45 Seconds  
(without alignments)  
76.908 Million cell updates/sec

Title: US-09-634-363-2  
Perfect score: 194  
Sequence: 1 YPIKPEAGCEDASPEELNRYASLRHYNLVTRQRY 36  
Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues  
Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR\_73:\*  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	194	100.0	36	2 A31358	peptide YY - human
2	194	100.0	90	2 S34569	peptide YY precurs
3	194	100.0	90	2 S34568	peptide YY precurs
4	194	100.0	97	2 S33795	peptide YY (clone
5	184	94.8	36	1 YIPG	peptide YY - pig
6	184	94.8	36	2 A60416	peptide YY - dog
7	184	94.8	98	2 A29364	peptide YY precurs
8	168	86.6	97	2 A5914	peptide YY precurs
9	156	80.4	36	1 PCGXA	pancreatic peptide
10	156	80.4	36	1 PCDFY	pancreatic peptide
11	156	80.4	36	2 A9743	pancreatic peptide
12	155	79.9	36	2 A26377	pancreatic peptide
13	152	78.4	36	2 S27054	peptide YY - A
14	147	75.8	37	2 S26954	peptide YY-related
15	147	75.8	97	2 A41979	neuropeptide Y pre
16	146	75.3	36	1 NPGY	neuropeptide Y - p
17	144	74.2	36	2 A30485	neuropeptide Y - r
18	144	74.2	36	2 A30485	neuropeptide Y - g
19	144	74.2	97	1 NVHUY	neuropeptide Y pre
20	144	74.2	98	2 A25916	neuropeptide Y pre
21	143	73.7	36	2 S07052	neuropeptide Y - s
22	141	72.7	36	2 A48540	neuropeptide Y - c
23	141	72.7	36	2 A39393	neuropeptide Y - l
24	141	72.7	97	2 JC1460	neuropeptide Y pre
25	140	72.2	96	2 B41979	neuropeptide Y pre
26	136	70.1	98	2 C41979	neuropeptide Y pre
27	135	69.6	93	2 I50809	peptide YY - river
28	133	68.6	36	1 YFRIS	peptide YY - short
29	133	68.6	104	2 I50808	neuropeptide Y pre

30	132	68.0	37	2 A26781	peptide YY - Ameri
31	122	62.9	36	2 S16943	neuropeptide Y - s
32	113	58.2	36	1 PCBO	pancreatic hormone
33	111	57.2	36	1 PCPG	pancreatic hormone
34	111	57.2	93	1 PCDG	pancreatic hormone
35	106	54.6	36	1 C61132	pancreatic hormone
36	106	54.6	36	2 C60071	pancreatic hormone
37	106	54.6	59	1 PCSH	pancreatic hormone
38	106	54.6	66	1 PCCT	pancreatic hormone
39	106	54.6	95	1 PCHU	pancreatic hormone
40	106	54.6	126	2 A28256	pancreatic hormone
41	105	54.1	36	1 A61132	pancreatic hormone
42	105	54.1	36	1 D61132	pancreatic hormone
43	104	53.6	36	2 B60413	pancreatic hormone
44	104	53.6	36	2 A28578	pancreatic hormone
45	103	53.1	36	2 JQ0365	pancreatic hormone

ALIGNMENTS

RESULT 1  
A31358  
peptide YY - human  
C:Species: Homo sapiens (man)  
C:Date: 31-Mar-1990 #sequence\_revision 31-Dec-1991 #text\_change 17-Mar-1999  
C:Accession: A31358; A60676  
R:Tatemoto, K.; Nakano, I.; Makk, G.; Angwin, P.; Mann, M.; Schilling, J.; Go, V.L.W.  
Biochem. Biophys. Res. Commun. 157, 713-717, 1988  
A:Title: Isolation and primary structure of human peptide YY.  
A:Reference number: A31358; MUID:89076307; PMID:3202875  
A:Accession: A31358  
A:Molecule type: protein  
A:Residues: 1-36 <YAT>  
A:Experimental source: colon  
R:Eberlein, G.A.; Eysselein, V.E.; Schaeffer, M.; Layer, P.; Grandt, D.; Goebell, H.; Peptides 10, 797-803, 1989  
A:Title: A new molecular form of PYY: structural characterization of human PYY(3-36)  
A:Reference number: A60676; MUID:90068171; PMID:2587421  
A:Accession: A60676  
A:Molecule type: protein  
A:Residues: 1-36 <EBE>  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; intestine; neuropeptide  
F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match	100.0%	Score 194;	DB 2;	Length 36;
Best Local Similarity	100.0%;	Pred. No. 4.9e-19;		
Matches	36;	Conservative	0;	Mismatches 0;
Indels	0;	Gaps	0;	
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DB	1	YPIKPEAGCEDASPEELNRYASLRHYNLVTRQRY	36	

RESULT 2  
S34569  
peptide YY precursor (clone L2) - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 02-Dec-1993 #sequence\_revision 13-Mar-1997 #text\_change 09-May-1997  
C:Accession: S34569  
R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.  
Biochim. Biophys. Acta 1173, 345-349, 1993  
A:Title: Cloning and structural determination of human peptide YY cDNA and gene.  
A:Reference number: S33795; MUID:93305732; PMID:8318545  
A:Accession: S34569  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-90 <KOH>  
C:Superfamily: pancreatic hormone

Query Match	100.0%	Score 194;	DB 2;	Length 90;
Best Local Similarity	100.0%;	Pred. No. 1.4e-18;		

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 36  
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 Db 29 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 64  
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RESULT 3  
 S34568  
 peptide YY precursor (clone 11) - human (fragment)  
 C:Species: Homo sapiens (man)  
 C>Date: 02-Dec-1993 #sequence\_revision 13-Mar-1997 #text\_change 09-May-1997  
 C:Accession: S34568  
 R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.  
 Blochim. Biophys. Acta 1173, 345-349, 1993  
 A>Title: Cloning and structural determination of human peptide YY cDNA and gene.  
 A:Reference number: S33795; MUID:93305732; PMID:8318545  
 A:Accession: S34568  
 A>Status: preliminary  
 A:Molecule type: mRNA  
 A:Residues: 1-90 <KOH>  
 C:Superfamily: pancreatic hormone

Query Match 100.0%; Score 194; DB 2; Length 90;  
 Best Local Similarity 100.0%; Pred. No. 1.4e-18;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 36  
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 Db 29 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 64  
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RESULT 4  
 S33795  
 peptide YY (clone S) - human  
 C:Species: Homo sapiens (man)  
 C>Date: 19-Mar-1997 #sequence\_revision 19-Mar-1997 #text\_change 20-Jun-2000  
 C:Accession: S33795  
 R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.  
 Blochim. Biophys. Acta 1173, 345-349, 1993  
 A>Title: Cloning and structural determination of human peptide YY cDNA and gene.  
 A:Reference number: S33795; MUID:93305732; PMID:8318545  
 A:Accession: S33795  
 A>Status: preliminary  
 A:Molecule type: mRNA  
 A:Residues: 1-97 <KOH>  
 A:Cross-references: GB:D13897; NID:g391723; PIDN:BAA02997.1; PID:g391724  
 C:Superfamily: pancreatic hormone

Query Match 100.0%; Score 194; DB 2; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 36  
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 Db 29 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 64  
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RESULT 5  
 YYPG  
 peptide YY - pig  
 C:Species: Sus scrofa domestica (domestic pig)  
 C>Date: 30-Apr-1982 #sequence\_revision 30-Apr-1982 #text\_change 23-Aug-1996  
 C:Accession: A01574  
 R:Fatemoto, K.  
 Proc. Natl. Acad. Sci. U.S.A. 79, 2514-2518, 1982  
 A>Title: Isolation and characterization of peptide YY (pYY), a candidate gut hormone tha  
 A:Reference number: A01574; MUID:82222168; PMID:6953409  
 A:Accession: A01574  
 A:Molecule type: protein  
 A:Residues: 1-36 <RAT>  
 C:Superfamily: pancreatic hormone  
 C:Keywords: amidated carboxyl end; hormone

F.36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 94.8%; Score 184; DB 1; Length 36;  
 Best Local Similarity 94.4%; Pred. No. 1e-17;  
 Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 36  
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 Db 1 YPAKPEAGEDASPELSRYASLRHYLNLVTQRY 36  
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RESULT 6  
 A60416  
 peptide YY - dog  
 C:Species: Canis lupus familiaris (dog)  
 C>Date: 11-Feb-1993 #sequence\_revision 11-Feb-1993 #text\_change 17-Mar-1999  
 C:Accession: A60416  
 R:Eysselein, V.E.; Eberlein, G.A.; Grandt, D.; Schaeffer, M.; Zehres, B.; Behn, U.; S  
 Peptides 11, 111-116, 1990  
 A>Title: Structural characterization of canine PYY.  
 A:Reference number: A60416; MUID:90259843; PMID:2342986  
 A:Accession: A60416  
 A:Molecule type: protein  
 A:Residues: 1-36 <EYS>  
 C:Superfamily: pancreatic hormone  
 C:Keywords: amidated carboxyl end; hormone; intestine  
 F.36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 94.8%; Score 184; DB 2; Length 36;  
 Best Local Similarity 94.4%; Pred. No. 1e-17;  
 Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAGEDASPELNRYASLRHYLNLVTQRY 36  
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 Db 1 YPAKPEAGEDASPELSRYASLRHYLNLVTQRY 36  
 |||||

RESULT 7  
 A29364  
 peptide YY precursor - rat  
 C:Species: Rattus norvegicus (Norway rat)  
 C>Date: 31-Dec-1988 #sequence\_revision 31-Dec-1988 #text\_change 16-Jul-1999  
 C:Accession: A37955; A29364; JT0416  
 R:Krasinski, S.D.; Wheeler, M.B.; Leiter, A.B.  
 Mol. Endocrinol. 5, 433-440, 1991  
 A>Title: Isolation, characterization, and developmental expression of the rat peptide  
 A:Reference number: A37955; MUID:91367188; PMID:1890992  
 A:Accession: A37955  
 A>Status: preliminary  
 A:Molecule type: DNA  
 A:Residues: 1-98 <KRA>  
 A:Cross-references: GB:S5720; NID:g235283; PIDN:AAB19752.1; PID:g235284  
 R:Leiter, A.B.; Toder, A.; Wolfe, H.J.; Taylor, I.L.; Cooperman, S.; Mandel, G.; Good  
 J. Biol. Chem. 262, 12984-12988, 1987  
 A>Title: Peptide YY. Structure of the precursor and expression in exocrine pancreas.  
 A:Reference number: A29364; MUID:88007492; PMID:3654598  
 A:Accession: A29364  
 A:Molecule type: mRNA  
 A:Residues: 1-98 <LEI>  
 A:Cross-references: GB:M17523; NID:g204316; PIDN:AAA41222.1; PID:g204317  
 R:Corder, R.; Gaillard, R.C.; Boehlen, P.  
 Regul. Pept. 21, 253-261, 1988  
 A>Title: Isolation and sequence of rat peptide YY and neuro peptide Y.  
 A:Reference number: JT0416; MUID:88321122; PMID:3413293  
 A:Accession: JT0416  
 A:Molecule type: protein  
 A:Residues: 29-64 <COR>  
 A:Experimental source: colon  
 C:Superfamily: pancreatic hormone

Query Match 94.8%; Score 184; DB 2; Length 98;  
 Best Local Similarity 94.4%; Pred. No. 3.2e-17;  
 Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;





Query Match 79.9%; Score 155; DB 2; Length 36;  
Best Local Similarity 75.0%; Pred. No. 7e-14;  
Matches 27; Conservative 4; Mismatches 5; Indels 0; Gaps 0;

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Db 1 YPPKPNPGEDAPPEELAKYVYALRHYINLITRQY 36

RESULT 13  
S27054  
neuropeptide Y - Atlantic cod  
C:Species: Gadus morhua (Atlantic cod)  
C>Date: 19-Mar-1997 #sequence\_revision 19-Mar-1997 #text\_change 31-Oct-1997  
C:Accession: S27054  
R:Jensen, J.; Conlon, J.M.  
Eur. J. Biochem. 210, 405-410, 1992  
A:Title: Characterization of peptides related to neuropeptide tyrosine and peptide tyros  
A:Reference number: S27054; MUID:93092973; PMID:1459125  
A:Accession: S27054  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-36 <JEN>  
C:Superfamily: pancreatic hormone

Query Match 78.4%; Score 152; DB 2; Length 36;  
Best Local Similarity 72.2%; Pred. No. 1.8e-13;  
Matches 26; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQY 36  
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Db 1 YPIKPNPGEDAPPEELAKYVYALRHYINLITRQY 36

RESULT 14  
S26954  
peptide YY-related protein, intestinal - chicken  
N:Alternate names: neuropeptide Y homolog; peptide tyrosine-tyrosine-related protein  
C:Species: Gallus gallus (Chicken)  
C>Date: 22-Nov-1993 #sequence\_revision 10-Nov-1995 #text\_change 07-Feb-1997  
C:Accession: S26954  
R:Conlon, J.M.; O'Harte, F.  
FEBS Lett. 313, 225-228, 1992  
A:Title: The primary structure of a PYV-related peptide from chicken intestine suggests  
A:Reference number: S26954; MUID:93076900; PMID:1446739  
A:Accession: S26954  
A:Molecule type: protein  
A:Residues: 1-37 <CON>  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; hormone; intestine; neuropeptide

Query Match 75.8%; Score 147; DB 2; Length 37;  
Best Local Similarity 69.4%; Pred. No. 8.3e-13;  
Matches 25; Conservative 8; Mismatches 3; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQY 36  
|| ||||| :||||| :||||:|||||  
Db 2 YPPKPNPGEDASPEELAKYVYALRHYINLITRQY 37

RESULT 15  
A41979  
neuropeptide Y precursor - chicken  
C:Species: Gallus gallus (chicken)  
C>Date: 31-Dec-1993 #sequence\_revision 31-Dec-1993 #text\_change 21-Jul-2000  
C:Accession: A41979  
R:Blomqvist, A.G.; Soderberg, C.; Lundell, I.; Milner, R.J.; Larhammar, D.  
Proc. Natl. Acad. Sci. U.S.A. 89, 2350-2354, 1992  
A:Title: Strong evolutionary conservation of neuropeptide Y: sequences of chicken, goldf  
A:Reference number: A41979; MUID:92196116; PMID:1549597  
A:Accession: A41979  
A:Status: preliminary  
A:Molecule type: mRNA

A:Residues: 1-97 <BLO>  
A:Cross-references: GB:M87294; NID:g212458; PIDN:AAA48991.1; PID:g212459  
A:Experimental source: central nervous system  
A>Note: sequence extracted from NCBI backbone (NCBIP:88404)  
C:Function:  
A:Description: neuropeptide inducing a number of behavioral effects including stimula  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; appetite; hormone; neuropeptide  
F:1-28/Domain: signal sequence #status predicted <Sig>  
F:29-64/Product: neuropeptide Y #status predicted <MAT>  
F:65-97/Domain: carboxyl-terminal propeptide #status predicted <CTP>  
F:64/Modified site: amidated carboxyl end (Tyr) (amide in mature form from following

Query Match 75.8%; Score 147; DB 2; Length 97;  
Best Local Similarity 66.7%; Pred. No. 2.5e-12;  
Matches 24; Conservative 8; Mismatches 4; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQY 36  
|| ||| :||||| :|| :||||:|||||  
Db 29 YPSKPDSPGEDAPAEEDMARYYSALRHYINLITRQY 64

Search completed: February 27, 2003, 14:38:20  
Job time : 46 secs

GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: February 27, 2003, 14:16:23 ; Search time 29 Seconds  
(without alignments)  
51.488 Million cell updates/sec

Title: US-09-634-363-2

Perfect score: 194

Sequence: 1 YPIKPEAFGEDASPELNRYASLRHYNLVTRQRY 36

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt\_40:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	194	100.0	97	1 PYV_HUMAN	P10082 homo sapien
2	184	94.8	36	1 PYV_PIG	P01305 sus scrofa
3	184	94.8	93	1 PYV_MOUSE	O9eps2 mus musculus
4	184	94.8	98	1 PYV_RAT	P10631 rattus norv
5	168	86.6	97	1 PYV_BOVIN	P51694 bos taurus
6	162	83.5	36	1 SPV_PHYBI	P80952 phyllomedus
7	158	81.4	36	1 PYV_AMICA	P29205 amia calva
8	156	80.4	36	1 PYV_LFSP	P09473 lepisosteus
9	155	79.9	36	1 PYV_ONCKI	P09474 oncorhynch
10	155	79.9	36	1 PYV_RAJRH	P29206 raja rhina
11	154	79.4	97	1 PYV_BRARE	O918p2 brachydanio
12	154	79.4	99	1 NEUY_DICLA	O9pta0 dicentrarch
13	153	78.9	36	1 NEUY_ONCMY	P29071 oncorhynch
14	153	78.9	36	1 PYV_RANRI	P29204 rana ridibu
15	152	78.4	36	1 NEUY_GADMO	P80167 gadus morhu
16	149	76.8	95	1 NEUY_ICTPU	O919d3 ictalurus p
17	147	75.8	37	1 PYV_CHICK	P29203 gallus gall
18	147	75.8	96	1 PYV_BRARE	O918p3 brachydanio
19	147	75.8	97	1 NEUY_CHICK	P28673 gallus gall
20	146	75.3	36	1 NEUY_PIG	P01304 sus scrofa
21	144	74.2	36	1 NEUY_RABIT	P09640 oryctolagus
22	144	74.2	36	1 PYV_ORENI	P81028 oreochromis
23	144	74.2	97	1 NEUY_HUMAN	P01303 homo sapien
24	144	74.2	97	1 NEUY_MOUSE	P57774 mus musculus
25	144	74.2	98	1 NEUY_RAT	P07808 rattus norv
26	143	73.7	36	1 NEUY_SHEEP	P14765 ovis aries
27	141	72.7	36	1 NEUY_RANRI	P29949 rana ridibu
28	141	72.7	97	1 NEUY_XENLA	P33689 xenopus lae
29	140	72.2	96	1 NEUY_CARAU	P28672 carassius a
30	139	71.6	97	1 PY_DICLA	O9pta9 dicentrarch
31	137	70.6	99	1 PYV_DICLA	O9pt99 dicentrarch
32	136	70.1	98	1 NEUY_TORMA	P28674 torpedo mar
33	135	69.6	93	1 PYV_LAMFL	P48098 lampetra fl

## RESULT 1

ID	PYV_HUMAN	STANDARD;	PRT;	97 AA.
AC	P10082;			
DT	01-MAR-1989 (Rel. 10, Created)			
DT	01-NOV-1995 (Rel. 32, Last sequence update)			
DT	16-OCT-2001 (Rel. 40, Last annotation update)			
DE	Peptide YY precursor (PYV) (Peptide tyrosine tyrosine).			
GN	PYY.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Colon mucosa;			
RX	MEDLINE=93305732; PubMed=8318545;			
RA	Kohri K., Nata K., Yonekura H., Nagai A., Konno K., Okamoto H.;			
RT	"Cloning and structural determination of human peptide YY cDNA and			
RL	gene.";			
RL	Biochim. Biophys. Acta 1173:345-349(1993).			
RN	[2]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Lymphocytes;			
RT	Herzog H.;			
RN	[3]			
RP	Submitted (NOV-1993) to the EMBL/GenBank/DBJ databases.			
RX	SEQUENCE OF 29-64, AND SYNTHESIS OF 29-64.			
RA	MEDLINE=89076307; PubMed=3202875;			
RA	Tatemoto K., Nakano I., Makk G., Angwin P., Mann M., Schilling J.,			
RA	Go V.L.W.;			
RT	"Isolation and primary structure of human peptide YY.";			
RL	Biochem. Biophys. Res. Commun. 157:713-717(1988).			
RN	[4]			
RP	SEQUENCE OF 29-64.			
RX	MEDLINE=90068171; PubMed=2587421;			
RA	Eberlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,			
RA	Goebell H., Niebel W., Davis M., Lee T.D., Shively J.E.,			
RA	Reeve J.R. Jr.;			
RT	"A new molecular form of PYY: structural characterization of human			
RL	PYY(3-36) and PYY(1-36).";			
RL	Peptides 10:797-803(1989).			
CC	-!- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,			
CC	HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC			
CC	MOBILITY.			
CC	-!- SUBCELLULAR LOCATION: Secreted.			
CC	-!- ALTERNATIVE PRODUCTS: 2 ISOFORMS: A LONG FORM (SHOWN HERE) AND A			
CC	SHORT FORM; ARE PRODUCED BY ALTERNATIVE SPLICING.			
CC	-!- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.			
CC	-----			
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration			
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -			
CC	the European Bioinformatics Institute. There are no restrictions on its			
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CC	modified and this statement is not removed. Usage by and for commercial			
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/			

## ALIGNMENTS

34	133	68.6	36	1	PYV_MYOSC	P09641 myoxocephal
35	133	68.6	104	1	NEUY_LAMFL	P48097 lampetra fl
36	132	68.0	69	1	PYV_LOPAM	P09475 lophius ame
37	122	62.9	36	1	PYV_PETMA	P80024 petromyzon
38	113	58.2	131	1	PAHO_BOVIN	P01302 bos taurus
39	111	57.2	36	1	PAHO_PIG	P01300 sus scrofa
40	111	57.2	93	1	PAHO_CANFA	P01299 canis famil
41	109	56.2	36	1	PAHO_CERSI	P37999 ceratotheri
42	107	55.2	36	1	PAHO_LARAR	P41337 larus argen
43	106	54.6	36	1	PAHO_MACMU	P33684 macaca mula
44	106	54.6	36	1	PAHO_RABIT	P41336 oryctolagus
45	106	54.6	36	1	PAHO_TAPPI	P39659 tapirus pin

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or send an email to license@isb-sib.ch).
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CC EMBL; D13897; BAA02997.1; -
CC EMBL; D13897; BAA02998.1; -
DR EMBL; D13897; BAA02998.1; -
DR EMBL; D13899; BAA03000.1; -
DR EMBL; D13902; BAA03002.1; -
DR EMBL; D25648; AAA36433.1; -
DR PIR; A31358; A31358.
DR PIR; A60676; A60676.
DR HSSP; P01303; IRON.
DR Genew; HGNC:9748; PYY.
DR MIM; 600781; -.
DR InterPro; IPR001955; Pancreatcic_hormn.
DR Pfam; PF00159; hormone3; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Pancreatcic_hormn; 1.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS0276; PANCREATIC_HORMONE_2; 1.
KW Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;
KW Signal; Alternative splicing.
FT SIGNAL 1 28
FT PEPTIDE 29 64 PEPTIDE YY.
FT PROPEP 68 97
FT MOD_RES 64 64
FT VARSPLIC 91 97
FT VARIANT 72 72
FT SEQUENCE 97 AA; 11046 MW; 11046 MW; DD16B73407F656A4 CRC64;
Query Match 100.0%; Score 194; DB 1; Length 97;
Best Local Similarity 100.0%; Pred. No. 1.1e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPELNRYASLRHLYNLVTRQRY 36
Db 29 YPIKPEAPGEDASPELNRYASLRHLYNLVTRQRY 64

RESULT 2
PYY_PIG
ID PYY_PIG STANDARD; PRT; 36 AA.
AC P01305;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Peptide YY (PYY) (Peptide tyrosine tyrosine)
GN PYY.
OS Sus scrofa (Pig), and
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823, 9615;
RN [1]
RP SPECIES=Pig;
RC MEDLINE=8222168; PubMed=6953409;
RX Tatamoto K.;
RA "Isolation and characterization of peptide YY (PYY), a candidate gut
RT hormone that inhibits pancreatic exocrine secretion.";
RL Proc. Natl. Acad. Sci. U.S.A. 79:2514-2518(1982).
RN [2]
RP SPECIES=C. familiaris;
RC MEDLINE=90259843; PubMed=2342986;
RX Eysselein V.E., Eberlein G.A., Grandt D., Schaeffer M., Zehres B.,
RA Meyer U., Schaefer D., Goebell H., Davis M., Lee T.D., Shively J.E.,
RA Beyer H.E., Reeve J.R. Jr.;
RT "Structural characterization of canine PYY.";
RL Peptides 11:111-116(1990).
CC -!- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,
CC HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC
CC MOBILITY.

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CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.
DR PIR; A01574; YYPG.
DR PIR; A60416; A60416.
DR HSSP; P01303; IRON.
DR InterPro; IPR001955; Pancreatcic_hormn.
DR Pfam; PF00159; hormone3; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Pancreatcic_hormn; 1.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS0276; PANCREATIC_HORMONE_2; 1.
KW Hormone; Amidation.
FT MOD_RES 36
FT SEQUENCE 36 AA; 4242 MW; 02CD6B8C586DCC8D CRC64;
Query Match 94.8%; Score 184; DB 1; Length 36;
Best Local Similarity 94.4%; Pred. No. 7.7e-19;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPELNRYASLRHLYNLVTRQRY 36
Db 1 YPAKPEAPGEDASPELSRYASLRHLYNLVTRQRY 36

RESULT 3
PYY_MOUSE
ID PYY_MOUSE STANDARD; PRT; 93 AA.
AC Q9EPS2;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Peptide YY precursor (PYY) (Peptide tyrosine tyrosine) (Fragment).
GN PYY.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/c; TISSUE=Liver;
RA Brown G.J., James R., Eddie L.W.;
RL Submitted (DEC-2000) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,
CC HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC
CC MOBILITY.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.
-----
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CC or send an email to license@isb-sib.ch).
-----
CC EMBL; AF325866; AAG42908.1; -.
DR HSSP; P01303; IRON.
DR MGD; MGI:99924; PYY.
DR InterPro; IPR001955; Pancreatcic_hormn.
DR Pfam; PF00159; hormone3; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Pancreatcic_hormn; 1.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS0276; PANCREATIC_HORMONE_2; 1.
KW Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;
KW Signal.
FT SIGNAL 1 28 BY SIMILARITY.
FT PEPTIDE 29 64 PEPTIDE YY.
FT PROPEP 68 93
FT MOD_RES 64
FT AMIDATION (G-65 PROVIDE AMIDE GROUP).
FT MISSING (IN SHORT ISOFORM).
FT T -> R.
FT /FTID-VAR_006382.
FT DD16B73407F656A4 CRC64;

```

[illegible]

RC RX  RA RA RT RT RL CL	<p>TISSUE=Pancreas; MEDLINE=91296574; PubMed=2067973;</p> <p>Conlon J.M., Bjennning C., Moon T.W., Youson J.H., Thim L.; "Neuropeptide Y-related peptides from the pancreas of a teleostean (eel), holostean (bowfin) and elasmobranch (skate) fish."; Peptides 12:221-226(1991).</p>
CC CC DR DR DR DR DR DR DR DR KW FT SQ	<p>-I- SIMILARITY: BELONGS TO THE NPY / PPV / PYY FAMILY. HSP; P01303; IRON.</p> <p>InterPro; IPR001955; Pancreatc_hormn. Pfam; PF00159; hormone3_1. PRINTS; PR00278; PANCHORMONE. ProDom; PD001267; Pancreatic_hormn; 1. SMART; SM00309; PAH; 1. PROSITE; PS00265; PANCREATIC_HORMONE_1; 1. DR PROSITE; PS02676; PANCREATIC_HORMONE_2; 1. Hormone; Amidation. MOD_RES 36 36 AMIDATION. SEQUENCE 36 AA; 4333 MW; 56B46F3C08666671 CRC64;</p>
Query Match            81.4%; Score 158; DB 1; Length 36; Best Local Similarity         77.8%; Pred. No. 2.7e-15; Matches      28; Conservative          3; Mismatches      5; Indels          0; Gaps          0	
QY  Db	<p>1 YPKPEAPGEDASPEELNRYIASLRHYLNLVTRQY 36                             :    :   : 1 YPPKPNPGEADPEELARYYTALRHYINLITRQY 36</p>
RESULT 8	
PY_LLEPS ID AC DT DT DT DE DE OS QS OS OC OC OX RN RP RC RX RA LA RT RT RT RL RN RN RP RC RC RX RA RT RT RT RT CC CC CC CC	<p>PY_LLEPS STANDARD; PROT; 36 AA.</p> <p>P09473;</p> <p>01-MAR-1989 (Rel. 10, Created)</p> <p>01-MAR-1989 (Rel. 10, Last sequence update)</p> <p>16-OCT-2001 (Rel. 40, Last annotation update) Peptide YY-like (PYY) (Neuropeptide Y-related peptide). Lepisosteus spatula (Alligator gar) (Atractosteus spatula), and Scyliorhinus canicula (Spotted dogfish) (Spottet catshark), and Squalus acanthias (Spiny dogfish). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Semionotiformes; Lepisosteidae; Lepisosteus. NCBI_TaxID=7917, 7830, 7797; [1]</p> <p>SEQUENCE.</p> <p>SPECIES=L.spatula; TISSUE=Pancneas; SPECIES=S.canicula; TISSUE=Pancreas; MEDLINE=88030594; PubMed=3311873; Pollock H.G., Kimmel J.R., Hamilton J.W., Rouse J.B., Ebner K.E., Lance V., Rawitch A.B.; "Isolation and structures of alligator gar (Lepisosteus spatula) insulin and pancreatic polypeptide." Gen. Comp. Endocrinol. 67:375-382(1987); [2] SEQUENCE, AND SYNTHESIS. SPECIES-S.canicula; TISSUE=Pancreas; MEDLINE=91209266; PubMed=2019251; Conlon J.M., Balasubramaniam A., Hazon N.; "Structural characterization and biological activity of a neuropeptide Y-related peptide from the dogfish, Scyliorhinus canicula"; Endocrinology 128:2273-2279(1991). [3]</p> <p>SEQUENCE.</p> <p>SPECIES-S.acanthias; TISSUE=Pancneas; Pan J.-G., Shaw C., Halton D.W., Thim L., Johnston C.F., Fairweather I., Buchanan K.D.; "Isolation and primary structure of the peptide Y from the pancreas of the spiny dogfish, Squalus acanthias."; Regul. Pept. 35:252-252(1991).</p> <p>-I- FUNCTION: ELICITS AN INCREASE IN ARTERIAL BLOOD PRESSURE. CC -I- SUBCELLULAR LOCATION: Secreted. CC -I- SIMILARITY: BELONGS TO THE NPV / PPV / PYY FAMILY</p>

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DR PIR: S07215; PCGXA.
DR PIR: A60022; PCDFY.
DR PIR: A49743; A49743.
DR HSSP: P01303; IRON.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormone3; 1.
DR PRINTS: PR00278; PANCHORMONE.
DR ProDom: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE: PS02076; PANCREATIC_HORMONE_2; 1.
KW Hormone; Amidation.
FT MOD_RES 36
SQ SEQUENCE 36 AA; 4291 MW; 56A6D8CC086660AA CRC64;

Query Match
Best Local Similarity 80.4%; Score 156; DB 1; Length 36;
Matches 27; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLTQRY 36
   || ||| ||||| |||| :||:||||:|||||
Db 1 YPPKPNPGDAPPEELAKYYSALRHYLNLTQRY 36

RESULT 9
PYI_ONCKI
ID PYI_ONCKI STANDARD; PRT; 36 AA.
AC P09474;
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-MAR-1989 (Rel. 10, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Peptide YY-like (PYY).
OS Oncorhynchus kisutch (Coho salmon), and
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX NCBI_TaxID=8019, 8022;
RN [1]
RP SEQUENCE.
RC SPECIES=O. kisutch; TISSUE=Pancreas;
RX MEDLINE=87128023; PubMed=3545195;
RA Kimmel J.B., Pflsetskaya E.M., Pollock H.G., Hamilton J.W.,
Rouse J.B., Ebner K.E., Rawitch A.B.;
RT "Structure of a peptide from coho salmon endocrine pancreas with
homology to neuropeptide Y.";
RL Biochem. Biophys. Res. Commun. 141:1084-1091(1986).
RN [2]
RP SEQUENCE.
RC SPECIES=O. mykiss; TISSUE=Brain, and Stomach;
RX MEDLINE=93092973; PubMed=1459125;
RA Jensen J., Conlon J.M.;
RT "Characterization of peptides related to neuropeptide tyrosine and
peptide tyrosine-tyrosine from the brain and gastrointestinal tract
of teleost fish.";
RL Eur. J. Biochem. 210:405-410(1992).
RN [3]
RP SEQUENCE.
RC SPECIES=O. mykiss; TISSUE=Brain;
RX MEDLINE=93157164; PubMed=1494498;
RA Barton C.L., Shaw C., Halton D.W., Thim L.;
RT "Rainbow trout (Oncorhynchus mykiss) neuropeptide Y.";
RL Peptides 13:1159-1163(1992).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.
DR PIR: A26377; A26377.
DR HSSP: P01303; IRON.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormone3; 1.
DR PRINTS: PR00278; PANCHORMONE.
DR ProDom: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE: PS02076; PANCREATIC_HORMONE_2; 1.
DR SEQUENCE FROM N.A.

DR PROSITE: PS02076; PANCREATIC_HORMONE_2; 1.
KW Hormone; Amidation.
FT MOD_RES 36
SQ SEQUENCE 36 AA; 4305 MW; 56A6D8CC08666671 CRC64;

Query Match
Best Local Similarity 79.9%; Score 155; DB 1; Length 36;
Matches 27; Conservative 4; Mismatches 5; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLTQRY 36
   || ||| ||||| |||| :||:||||:|||||
Db 1 YPPKPNPGDAPPEELAKYYSALRHYLNLTQRY 36

RESULT 10
PYI_RAJRH
ID PYI_RAJRH STANDARD; PRT; 36 AA.
AC P29206;
DT 01-DEC-1992 (Rel. 24, Created)
DT 01-DEC-1992 (Rel. 24, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Peptide YY-like (PYY).
OS Raja rhina (Skate).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC Elasmobranchii; Squala; Hyphosqualea; Pristiogalea; Batoidea;
OC Rajiformes; Rajidae; Raja.
OX NCBI_TaxID=30478;
RN [1]
RP SEQUENCE.
RX MEDLINE=91296574; PubMed=2067973;
RA Conlon J.M., Bjerning C., Moon T.W., Youson J.H., Thim L.;
RT "Neuropeptide Y-related peptides from the pancreas of a teleostean
(eel), holostean (bowfin) and elasmobranch (skate) fish.";
RL Peptides 12:221-226(1991).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.
DR HSSP: P01303; IRON.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormone3; 1.
DR PRINTS: PR00278; PANCHORMONE.
DR ProDom: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE: PS02076; PANCREATIC_HORMONE_2; 1.
KW Hormone; Amidation.
FT MOD_RES 36
SQ SEQUENCE 36 AA; 4251 MW; 07A7D9DC196660B6 CRC64;

Query Match
Best Local Similarity 79.9%; Score 155; DB 1; Length 36;
Matches 26; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLTQRY 36
   || ||| ||||| |||| :||:||||:|||||
Db 1 YPPKPNPGDAPPEELAKYYSALRHYLNLTQRY 36

RESULT 11
PYI_BRARE
ID PYI_BRARE STANDARD; PRT; 97 AA.
AC Q918P2;
DT 15-JUN-2002 (Rel. 41, Created)
DT 15-JUN-2002 (Rel. 41, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Peptide YY precursor.
GN PYY.
OS Brachydanio rerio (Zebrafish) (Danio rerio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OX NCBI_TaxID=7955;
RN [1]
RP SEQUENCE FROM N.A.

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RX MEDLINE=20396163; PubMed=10936170;
RA Soderberg C., Wraith A., Ringvall M., Yan Y.L., Postlethwait J.H.,
RA Brodin L., Larhammar D.;
RT "Zebrafish genes for neuropeptide Y and peptide YY reveal origin by
RT chromosome duplication from an ancestral gene linked to the homeobox
RT cluster.";
RL J. Neurochem. 75:908-918(2000).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PPY / PPY / PPY FAMILY.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AF233875; AAF79942.1; -
DR HSSP; P01303; IRON.
DR ZFIN; ZDB-GENE-980526-71; ppy.
DR InterPro; IPR001955; Pancreatic_hormn.
DR Pfam; PF00159; hormones; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Panchormone.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS00276; PANCREATIC_HORMONE_2; 1.
DR Hormone; Cleavage on pair of basic residues; Amidation; Signal;
KW Neuropeptide.
FT SIGNAL 1 28
FT CHAIN 29 64
FT PROPEP 68 97
FT MOD_RES 64 64
FT SEQUENCE 97 AA; 11175 MW; 96EA07EF0991AC2D CRC64;
Query Match 79.4%; Score 154; DB 1; Length 97;
Best Local Similarity 72.2%; Pred. No. 3,1e-14;
Matches 26; Conservative 6; Mismatches 4; Indels 0; Gaps 0;
QY 1 YPIKPEAGEDASPEELNRYVYASLRHYNLVTRQRY 36
Db 29 YPKPKPNDGDAAPELAKYVYALRYHNLVTRQRY 64
RESULT 12
NEUY_DICLA STANDARD; PRT; 99 AA.
AC Q9PTA0; Q9PT97;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Neuropeptide Y precursor (NPY).
GN NPY.
OS Dicertrarchus labrax (European sea bass).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Acanthomorpha; Acanthopterygii; Percormorpha; Perciformes; Percoidae;
OC Moronidae; Dicertrarchus.
OX NCBI_TaxID=13489;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Cerda-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.,
RA Larhammar D.;
RT "Neuropeptide Y, endocrine gut peptide YY and fish pancreatic peptide
RT Y expression in the brain of a teleost fish (Dicertrarchus labrax):
RT from cloning to evolutionary considerations.";
RL Submitted (APR-1998) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE OF 1-62 FROM N.A.
RC TISSUE=Blood;

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RA Cerda-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.,
RA Larhammar D.;
RT "Deduced peptide sequence of neuropeptide Y exon 2 from sea bass
RT (Dicertrarchus labrax).";
RL Submitted (APR-1998) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN
CC SECRETION OF GONADOTROPHIN-RELEASE HORMONE.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PPY / PPY / PPY FAMILY.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AJ005378; CAB64932.1; -
DR EMBL; AJ005381; CAB64935.1; -
DR HSSP; P01303; IRON.
DR InterPro; IPR001955; Pancreatic_hormn.
DR Pfam; PF00159; hormones; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Panchormone.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS00276; PANCREATIC_HORMONE_2; 1.
DR Neuropeptide; Cleavage on pair of basic residues; Signal; Amidation.
FT SIGNAL 1 28
FT CHAIN 29 64
FT PROPEP 68 99
FT MOD_RES 64 64
FT SEQUENCE 99 AA; 11260 MW; 4EEFAED164964184 CRC64;
Query Match 79.4%; Score 154; DB 1; Length 99;
Best Local Similarity 72.2%; Pred. No. 3,2e-14;
Matches 26; Conservative 6; Mismatches 4; Indels 0; Gaps 0;
QY 1 YPIKPEAGEDASPEELNRYVYASLRHYNLVTRQRY 36
Db 29 YPKPKPNDGDAAPELAKYVYALRYHNLVTRQRY 64
RESULT 13
NEUY_ONCMY STANDARD; PRT; 36 AA.
AC P29071;
DT 01-DEC-1992 (Rel. 24, Created)
DT 01-DEC-1992 (Rel. 24, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Neuropeptide Y (NPY).
GN NPY.
OS Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX NCBI_TaxID=8022;
RN [1]
RP SEQUENCE.
RC TISSUE=Brain;
RX MEDLINE=93092973; PubMed=1459125;
RA Jensen J., Conlon J.M.;
RT "Characterization of peptides related to neuropeptide tyrosine and
RT peptide tyrosine-tyrosine from the brain and gastrointestinal tract
RT of teleost fish.";
RL Eur. J. Biochem. 210:405-410(1992).
CC -!- FUNCTION: NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN
CC SECRETION OF GONADOTROPHIN-RELEASE HORMONE.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PPY / PPY / PPY FAMILY.
DR HSSP; P01303; IRON.
DR InterPro; IPR001955; Pancreatic_hormn.

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DR Pfam: PF00159; hormone3; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Pancreatic_hormn; 1.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS0276; PANCREATIC_HORMONE_2; 1.
DR Neuropeptide; Amidation.
FT MOD_RES 36
SQ SEQUENCE 36 AA; 4311 MW; E2A32293A866611C CRC64;

Query Match      78.9%; Score 153; DB 1; Length 36;
Best Local Similarity 72.2%; Pred. No. 1.3e-14;
Matches 26; Conservative 5; Mismatches 5; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
   ||||| ||||| ||| :|| :|||:|||||
Db 1 YVPKPENPGEDAPTEELAKYYTALRHYINLITRQRY 36

RESULT 14
PYV_RANRI
ID PYV_RANRI STANDARD; PRT; 36 AA.
AC P29204;
DT 01-DEC-1992 (Rel. 24, Created)
DT 01-DEC-1992 (Rel. 24, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Peptide YY-like (PYV).
OS Rana ridibunda (Laughing frog) (Marsh frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranioidea; Ranidae; Rana.
OX NCBI_TaxID=8406;
RN [1]
RP SEQUENCE.
RC TISSUE=Intestine;
RX MEDLINE=92319697; PubMed=1620652;
RA Conlon J.M., Chartrel N., Vaudry H.;
RT "Primary structure of frog PYV: implications for the molecular
   evolution of the pancreatic polypeptide family.";
RL Peptides 13:145-149(1992).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
DR HSP; P01303; IRON.
DR InterPro; IPR001955; Pancreatic_hormn.
DR Pfam; PF00159; hormone3; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Pancreatic_hormn; 1.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS0276; PANCREATIC_HORMONE_2; 1.
DR Hormone; Amidation.
FT MOD_RES 36
SQ SEQUENCE 36 AA; 4279 MW; 0725C3C6304F663 CRC64;

Query Match      78.9%; Score 153; DB 1; Length 36;
Best Local Similarity 75.0%; Pred. No. 1.3e-14;
Matches 27; Conservative 4; Mismatches 5; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
   ||||| ||||| ||| :|| :|||:|||||
Db 1 YVPKPENPGEDASPEETKYLTLRHYINLITRQRY 36

RESULT 15
NEUY_GADMO
ID NEUY_GADMO STANDARD; PRT; 36 AA.
AC P80167;
DT 01-DEC-1992 (Rel. 24, Created)
DT 01-DEC-1992 (Rel. 24, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Neuropeptide Y (NPY).
GN NPY.
OS Gadus morhua (Atlantic cod).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

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OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OX Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae; Gadus.
RN [1]
RP SEQUENCE.
RC TISSUE=Brain;
RX MEDLINE=93092973; PubMed=1459125;
RA Jensen J., Conlon J.M.;
RT "Characterization of peptides related to neuropeptide tyrosine and
   peptide tyrosine-tyrosine from the brain and gastrointestinal tract
   of teleost fish.";
RL Eur. J. Biochem. 210:405-410(1992).
CC -!- FUNCTION: NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN
   SECRETION OF GONADOTROPHIN-RELEASE HORMONE.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
DR PIR; S27054; S27054.
DR HSP; P01303; IRON.
DR InterPro; IPR001955; Pancreatic_hormn.
DR Pfam; PF00159; hormone3; 1.
DR PRINTS; PR00278; PANCHORMONE.
DR ProDom; PD001267; Pancreatic_hormn; 1.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE; PS0276; PANCREATIC_HORMONE_2; 1.
DR Neuropeptide; Amidation.
FT MOD_RES 36
SQ SEQUENCE 36 AA; 4267 MW; 17B09AA83867A7B6 CRC64;

Query Match      78.4%; Score 152; DB 1; Length 36;
Best Local Similarity 72.2%; Pred. No. 1.8e-14;
Matches 26; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
   ||||| ||||| ||| :|| :|||:|||||
Db 1 YPIKPENPGEDAPADELAKYYSLRHYINLITRQRY 36

Search completed: February 27, 2003, 14:36:51
Job time : 30 secs

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OM protein - protein search, using sw model

Run on: February 27, 2003, 14:32:08 ; Search time 29 Seconds  
(without alignments)  
255.783 Million cell updates/sec

Title: US-09-634-363-2  
Perfect score: 194  
Sequence: 1 YPIKPEAGDASPEELNRYASLRHYNLVTRQRY 36

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues 671580  
Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

- Database : SPTREMBL\_21.\*
- 1: sp\_archaea.\*
  - 2: sp\_bacteria.\*
  - 3: sp\_fungi.\*
  - 4: sp\_human.\*
  - 5: sp\_invertebrate.\*
  - 6: sp\_mammal.\*
  - 7: sp\_mhc.\*
  - 8: sp\_organelle.\*
  - 9: sp\_phage.\*
  - 10: sp\_plant.\*
  - 11: sp\_rodent.\*
  - 12: sp\_virus.\*
  - 13: sp\_vertebrate.\*
  - 14: sp\_unclassified.\*
  - 15: sp\_rvirus.\*
  - 16: sp\_bacteriap.\*
  - 17: sp\_archaeap.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	188	96.9	36	Q9TR93	Q9tr93 oryctolagus
2	184	94.8	98	11 Q91XD0	Q91xd0 mus musculu
3	176	90.7	34	Q9TR92	Q9tr92 oryctolagus
4	151	77.8	99	13 Q90WF4	Q90wf4 paralichthy
5	149	76.8	95	13 Q919D3	Q919d3 ictalurus p
6	147	75.8	96	13 Q9DGK7	Q9dgk7 cyprinus ca
7	146	75.3	76	6 Q9N0M5	Q9n0m5 sus scrofa
8	144	74.2	97	6 Q9XSW6	Q9xsw6 macaca mula
9	143	73.7	89	11 Q925V2	Q925v2 mus musculu
10	143	73.7	90	6 Q9TSI6	Q9tsi6 ovis aries
11	143	73.7	97	6 Q8SPF7	Q8spf7 ovis aries
12	141	72.7	97	13 Q9PW68	Q9pw68 typhlonecte
13	141	72.7	99	13 Q90WF3	Q90wf3 paralichthy
14	136	70.1	36	13 Q9PS46	Q9ps46 scyllorhinu
15	132	68.0	97	13 Q90WF2	Q90wf2 paralichthy
16	98	50.5	59	6 Q9GK10	Q9gk10 sus scrofa

17	69	35.6	21	13	Q9PS51	Q9ps51 lampetra fl
18	67	34.5	33	4	Q9NRI6	Q9nri6 homo sapien
19	63	32.5	89	5	Q9U0S9	Q9u0s9 lymanaea sta
20	59	30.4	92	5	Q27441	Q27441 aplysia cal
21	58.5	30.2	676	12	Q8QWY3	Q8qwy3 cowpox viru
22	58	29.9	77	16	Q97092	Q97q92 streptococc
23	58	29.9	621	12	Q38017	Q38017 salmonid he
24	56.5	29.1	504	8	Q9TM13	Q9tml3 cyanidium c
25	56.5	29.1	734	3	Q9P3S1	Q9p3s1 neurospora
26	56.5	29.1	6420	2	P95814	P95814 streptomyc
27	54.5	28.1	356	16	Q9L218	Q9l218 streptomyc
28	54.5	28.1	359	3	Q9C439	Q9c439 pneumocysti
29	54	27.8	469	5	Q9V5H6	Q9v5h6 drosophila
30	54	27.8	501	4	Q96Q06	Q96q06 homo sapien
31	54	27.8	501	4	Q8WUL4	Q8wul4 homo sapien
32	54	27.8	501	4	Q96LX5	Q96lx5 homo sapien
33	53.5	27.6	377	3	Q96WX4	Q96wx4 pneumocysti
34	53.5	27.6	935	11	Q91XY1	Q91xy1 mus musculu
35	53	27.3	321	17	Q9YD78	Q9ydw8 aeropyrum p
36	53	27.3	325	4	Q9NW90	Q9nw90 homo sapien
37	53	27.3	453	4	Q96GG1	Q96gg1 homo sapien
38	53	27.3	530	5	O16850	O16850 caenorhabdi
39	53	27.3	795	10	Q8S3W0	Q8s3w0 aegilops ma
40	53	27.3	835	4	Q96C69	Q96c69 homo sapien
41	53	27.3	872	2	Q54307	Q54307 streptomyc
42	53	27.3	1145	11	Q9DBV3	Q9dbv3 mus musculu
43	53	27.3	1564	4	Q14160	Q14160 homo sapien
44	53	27.3	1630	4	Q8MWV8	Q8mwv8 homo sapien
45	52.5	27.1	114	10	Q9XH20	Q9xh20 arabidopsis

ALIGNMENTS

RESULT 1

ID Q9TR93 PRELIMINARY; PRT; 36 AA.  
AC Q9TR93;  
DT 01-MAY-2000 (TREMBlrel. 13, Created)  
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)  
DT 01-OCT-2001 (TREMBlrel. 18, Last annotation update)  
DE Peptide YY, PYY(1-36).  
OS Oryctolagus cuniculus (Rabbit).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.  
OX NCBI\_taxID=9986;  
RN [1]  
RP SEQUENCE.  
RX MEDLINE=95075735; PubMed=7984499;  
RA Grandt D., Schimiczek M., Struk K., Shively J., Eysselein V.E.,  
RA Goebell H., Reeve J.R.Jr.;  
RT "Characterization of two forms of peptide YY, PYY(1-36) and PYY(3-36),  
RT in the rabbit".  
RL Peptides 15:815-820(1994).  
CC -!- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.  
DR HSSP; P01303; IRON.  
DR InterPro; IPR001955; Panchreatic\_hormn.  
DR Pfam; PF00159; hormone3; 1.  
DR PRINTS; PR00278; PANCHORMONE.  
DR PRODOM; PD001267; Panchreatic\_hormn; 1.  
DR SMART; SM00309; PAH; 1.  
DR PROSITE; PS00265; PANCHREATIC\_HORMONE\_1; 1.  
DR PROSITE; PS00276; PANCHREATIC\_HORMONE\_2; 1.  
KW Amidation.  
SQ SEQUENCE. 36 AA; 4285 MW; 02D499C8086DCC8D CRC64;

Query Match 96.9%; Score 188; DB 6; Length 36;  
Best Local Similarity 97.2%; Pred. No. 2.3e-18;  
Matches 35; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAGDASPEELNRYASLRHYNLVTRQRY 36  
|||  
DB 1 YPSKPEAGDASPEELNRYASLRHYNLVTRQRY 36

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RESULT 2
Q91XDO ID Q91XDO PRELIMINARY; PRT; 98 AA.
AC Q91XDO;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Unknown (protein for MGC:19143).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
RN [1]
RS SEQUENCE FROM N.A.
RC TISSUE=COLON;
RA Strausberg R.;
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC010821; AAH10821.1; -
DR InterPro; IPR001955; Pncreactic_hormn.
DR Pfam; PF00159; hormone3; 1.
DR ProDom; PD001267; Pncreactic_hormn; 1.
DR PROSITE; PS00265; PANGREATIC_HORMONE_1; UNKNOWN_1.
DR PROSITE; PS00276; PANGREATIC_HORMONE_2; 1.
SQ SEQUENCE 98 AA; 11064 MW; 7AF165A1052C3249 CRC64;

Query Match 94.8%; Score 184; DB 11; Length 98;
Best Local Similarity 94.4%; Pred. No. 2.4e-17;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 YPIKPEAGDASPEELNRYVYASLRHYLNLVTRQRY 36
|| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 29 YPAKPEAGDASPEELSRYYASLRHYLNLVTRQRY 64

RESULT 3
Q9TR92 ID Q9TR92 PRELIMINARY; PRT; 34 AA.
AC Q9TR92;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-OCT-2001 (TrEMBLrel. 18, Last annotation update)
DE Peptide YY, PYY(3-36).
OS Oryctolagus cuniculus (Rabbit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
NCBI_TaxID=9986;
RN [1]
RS SEQUENCE.
RX MEDLINE=95075735; PubMed=7984499;
RA Grand D., Schmiczek M., Struk K., Shively J., Eysselein V.E.,
RA Goebell H., Reeve J.R.Jr.;
RT "Characterization of two forms of peptide YY, PYY(1-36) and PYY(3-36),
RT in the rabbit.";
RL Peptides 15:815-820(1994).
CC -1- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.
DR HSSP; P01303; IRON.
DR InterPro; IPR001955; Pncreactic_hormn.
DR Pfam; PF00159; hormone3; 1.
DR ProDom; PD001267; Pncreactic_hormn; 1.
DR SMART; SM00309; PAH; 1.
DR PROSITE; PS00265; PANGREATIC_HORMONE_1; 1.
DR PROSITE; PS00276; PANGREATIC_HORMONE_2; 1.
KW Animation.
SQ SEQUENCE 34 AA; 4024 MW; 02D4E9C38BA5FC8D CRC64;

Query Match 90.7%; Score 176; DB 6; Length 34;
Best Local Similarity 100.0%; Pred. No. 9.1e-17;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 KPEAPGEDASPEELNRYVYASLRHYLNLVTRQRY 36
||||| ||||| ||||| ||||| ||||| ||||| |||||

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DR HSSP; P01303; IRON.  
DR InterPro; IPR001955; Pancreatic\_hormn.  
DR Pfam; PF00159; hormones; 1.  
DR PRINTS; PR00278; PANCHORMONE.  
DR ProDom; PD001267; Pancreatic\_hormn; 1.  
DR SMART; SM00309; PAH; 1.  
DR PROSITE; PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE; PS00276; PANCREATIC\_HORMONE\_2; 1.  
KW Amidation; Neuropeptide.  
FT NON\_TER 1  
FT CHAIN 10 >45 NEUROPEPTIDE Y.  
FT NON\_TER 76  
SQ SEQUENCE 76 AA; 8596 MW; 84E40EC2A4F94B2C CRC64;

Query Match 75.3%; Score 146; DB 6; Length 76;  
Best Local Similarity 69.4%; Pred. No. 2.5e-12;  
Matches 25; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 YPIKPEAPGEDASPEELNRYYSALRHVYLNLTQRY 36  
||||| ||||| | : ||||| : |||||  
Db 10 YPSKPDNPGEDAPAEADLMARYYSALRHVYLNLTQRY 45

RESULT 8  
Q9XSW6 PRELIMINARY; PRT; 97 AA.  
ID Q9XSW6 AC Q9XSW6;  
AC Q9XSW6;  
DT 01-NOV-1999 (TrEMBLrel. 12, Created)  
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)  
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)  
DE Neuropeptide Y.  
GN NPY.  
OS Macaca mulatta (Rhesus macaque).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
OC Cercopithecoidea; Macaca.  
OC NCBI\_TaxID=9544;  
RN [1]  
RP SEQUENCE FROM N.A.  
RA Adler L.A., Golos T.G., Terasawa E.;  
RT "Developmental changes in NPY mRNA expression in female rhesus monkeys.";  
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.  
RC -1 SIMILARITY: BELONGS TO THE NPY / PPY / PPY FAMILY.  
DR EMBL; AF162280; AAD43583.1; -;  
DR HSSP; P01303; IRON  
DR InterPro; IPR001955; Pancreatic\_hormn.  
DR Pfam; PF00159; hormones; 1.  
DR PRINTS; PR00278; PANCHORMONE.  
DR ProDom; PD001267; Pancreatic\_hormn; 1.  
DR SMART; SM00309; PAH; 1.  
DR PROSITE; PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE; PS00276; PANCREATIC\_HORMONE\_2; 1.  
KW Amidation.  
SQ SEQUENCE 97 AA; 10840 MW; 2D2209BAC20BD5EE CRC64;

Query Match 74.2%; Score 144; DB 6; Length 97;  
Best Local Similarity 66.7%; Pred. No. 6.2e-12;  
Matches 24; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

Qy 1 YPIKPEAPGEDASPEELNRYYSALRHVYLNLTQRY 36  
||||| ||||| | : ||||| : |||||  
Db 29 YPSKPDNPGEDAPAEADLMARYYSALRHVYLNLTQRY 64

RESULT 9  
Q925V2 PRELIMINARY; PRT; 89 AA.  
ID Q925V2 AC Q925V2;  
DT 01-DEC-2001 (TrEMBLrel. 19, Created)  
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)  
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)  
DE Neuropeptide Y (Fragment).

[illegible]

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RESULT 14
Q9PS46
ID Q9PS46 PRELIMINARY; PRT; 36 AA.
AC Q9PS46;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-OCT-2001 (TREMBLrel. 18, Last annotation update)
DE- Neuropeptide Y, NPY-PANCREATIC polypeptide homolog.
OS Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
OC Scyliorhinidae; Scyliorhinus.
OX NCBI_TaxID=7830;
RN [1]
RP SEQUENCE.
RX MEDLINE=92396601; PubMed=1523163;

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Query Match 68.0%; Score 132; DB 13; Length 97;  
Best Local Similarity 61.1%; Pred. No. 2.6e-10;  
Matches 22; Conservative 8; Mismatches 6; Indels 0; Gaps 0;

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